STATE OF CALIFORNIA
The Resources Agency

Department of Water Resources

BULLETIN No. 91-19

WATER WELLS IN THE HARPER, SUPERIOR, AND CUDDEBACK VALLEY AREAS

SAN BERNARDINO COUNTY, CALIFORNIA

Prepared by
United States Department of Interior
Geological Survey

FEDERAL-STATE COOPERATIVE GROUND WATER INVESTIGATIONS

MAY 1971

NORMAN B. LIVERMORE, JR.
Secretary for Resources
The Resources Agency

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
Director
Department of Water Resources

STATE OF CALIFORNIA

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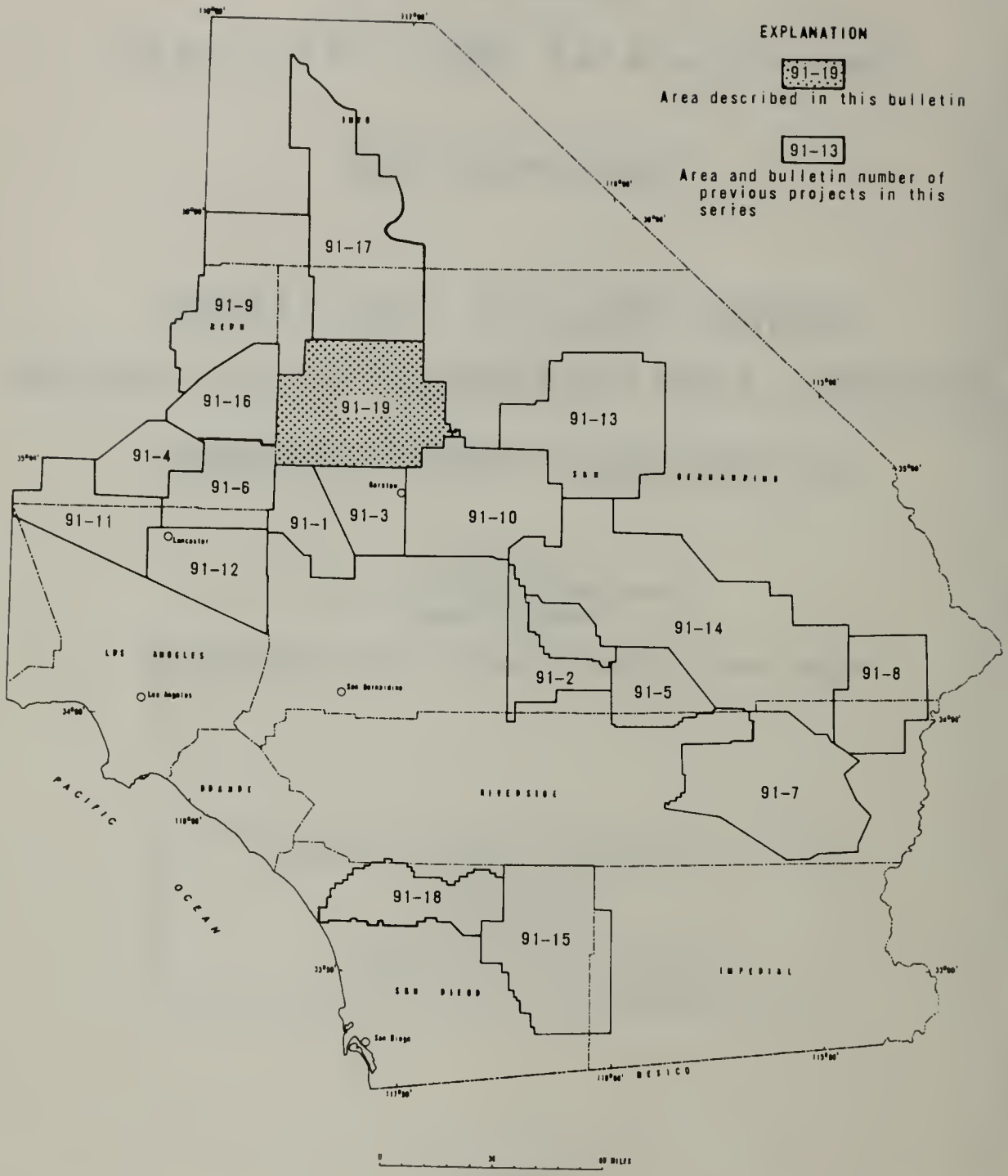


PART OF SOUTHERN CALIFORNIA SHOWING AREA DESCRIBED IN THIS AND PREVIOUS BULLETINS OF THE NO. 91 SERIES

ABSTRACT

This bulletin is one of a series on water wells and springs in southern California desert areas. The series is prepared by the U. S. Geological Survey and published by the California Department of Water Resources.

Each bulletin locates water wells and springs in a part of the southern California desert regions; describes well depth and yield, water use and level on dates observed; names the well owner; provides pumping data, including depths, rates, static water levels, drawdowns, and specific capacities; and lithologic data from drillers' well logs.

Earlier bulletins in the series are:

Bulletin No. 91-1: Data on Wells in the West Part of the Middle Mojave Valley Area, San Bernardino County, California. June 1960; 126 p. [Out of print]

91-2: Data on Water Wells and Springs in the Yucca Valley-Twentynine Palms Area, San Bernardino and Riverside Counties, California. June 1960; 164 p. [Out of print]

91-3: Data on Water Wells in the Eastern Part of the Middle Mojave Valley Area, San Bernardino County, California. August 1960; 223 p. [Out of print]

91-4: Data on Water Wells in the Willow Springs, Gloster, and Chaffee Areas, Kern County, California. September 1960; 90 p. [$1.50 a copy]

91-5: Data on Water Wells in the Dale Valley Area, San Bernardino and Riverside Counties, California. March 1961; 60 p. [$1.50 a copy]

91-6: Data on Wells in the Edwards Air Force Base Area, California. June 1962; 212 p. [$3.00 a copy]

91-7: Data on Water Wells and Springs in the Chuckwalla Valley Area, Riverside County, California. May 1963; 78 p. [Out of print]

91-8: Data on Water Wells and Springs in the Rice and Vidal Valley Areas, Riverside and San Bernardino Counties, California. May 1963; 36 p. [Out of print]

91-9: Data on Water Wells in Indian Wells Valley Area, Inyo, Kern, and San Bernardino Counties, California. May 1963; 246 p. [$4.00 a copy]

91-10: Data on Wells and Springs in the Lower Mojave Valley Area, San Bernardino County, California. December 1963; 212 p. [$3.00 a copy]

91-11: Data on Water Wells in the Western Part of the Antelope Valley Area, Los Angeles and Kern Counties, California. May 1965; 278 p. [$1.50 a copy]

91-12: Data on Water Wells in the Eastern Part of the Antelope Valley Area, Los Angeles County, California. December 1966; 448 p. [$4.75 a copy]

91-13: Water Wells and Springs in Soda, Silver, and Cronise Valleys, San Bernardino County, California. August 1967; 80 p. [$1.00 a copy]

91-14: Water Wells and Springs in Bristol, Broadwell, Cadiz, Danby, and Lavic Valleys and Vicinity, San Bernardino and Riverside Counties, California. August 1967; 80 p. [$1.50 a copy]

91-15: Water Wells and Springs in Borrego, Carrizo, and San Felipe Valley Areas, San Diego and Imperial Counties, California. January 1968; 142 p. [$2.00 a copy]

91-16: Water Wells and Springs in the Fremont Valley Area, Kern County, California. February 1969; 158 p. [$2.00 a copy]

91-17: Water Wells and Springs in the Panamint, Searles, and Knob Valleys, San Bernardino and Inyo Counties, California. December 1969; 110 p. [$2.00 a copy]

91-18: Water Wells in the San Luis Rey River Valley Area, San Diego County, California.

UNITED STATES
DEPARTMENT OF THE INTERIOR

7206-02

GEOLOGICAL SURVEY
Water Resources Division
District Office
855 Oak Grove Avenue
Menlo Park, California 94025

November 9, 1970

Mr. William R. Gianelli, Director
Department of Water Resources
State of California--Resources Agency
Post Office Box 388
Sacramento, California 95802

Dear Mr. Gianelli:

We are pleased to enclose, for publication by the Department of Water Resources, the U.S. Geological Survey report on "Water Wells in the Harper, Superior, and Cuddeback Valley Areas, San Bernardino County, California," by W. R. Moyle, Jr.

This report--one of a series on the desert region of southern California--was prepared by our Garden Grove subdistrict office, in accordance with the cooperative agreement between the State of California and the U.S. Geological Survey. It tabulates all available data on wells in the indicated area and contains maps showing the location of wells and springs and the generalized geology with special reference to the water-yielding deposits.

Very truly yours,

Lee R. Peterson

Lee R. Peterson
Acting District Chief

FOREWORD

Previous Investigations and Acknowledgments

Data on ground water in Harper, Superior, and Cuddeback Valleys are contained in U.S. Geological Survey reports by Mendenhall (1909), Waring (1915), Thompson (1921 and 1929), Kunkel (1956), Stone (1957), and Benda and others (1960). The data on wells from these reports are included herein.

The generalized geology shown in this bulletin was compiled and modified from published maps by Dibblee (1968) and from unpublished maps by T. W. Dibblee, Jr., G. I. Smith, T. H. McCulloh (written commun., 1953), and W. R. Moyle, Jr.

The California Department of Water Resources provided access to all pertinent information in its files. The cooperation and assistance given by private well owners, well drillers, and others contributed materially to the completeness of the data presented in this report and are gratefully acknowledged.

Purpose and Scope of the Investigation

The data in this bulletin were collected by the U.S. Geological Survey, in cooperation with the California Department of Water Resources, as a phase of the investigation of water wells and springs and general hydrologic conditions throughout much of the desert region of southern California.

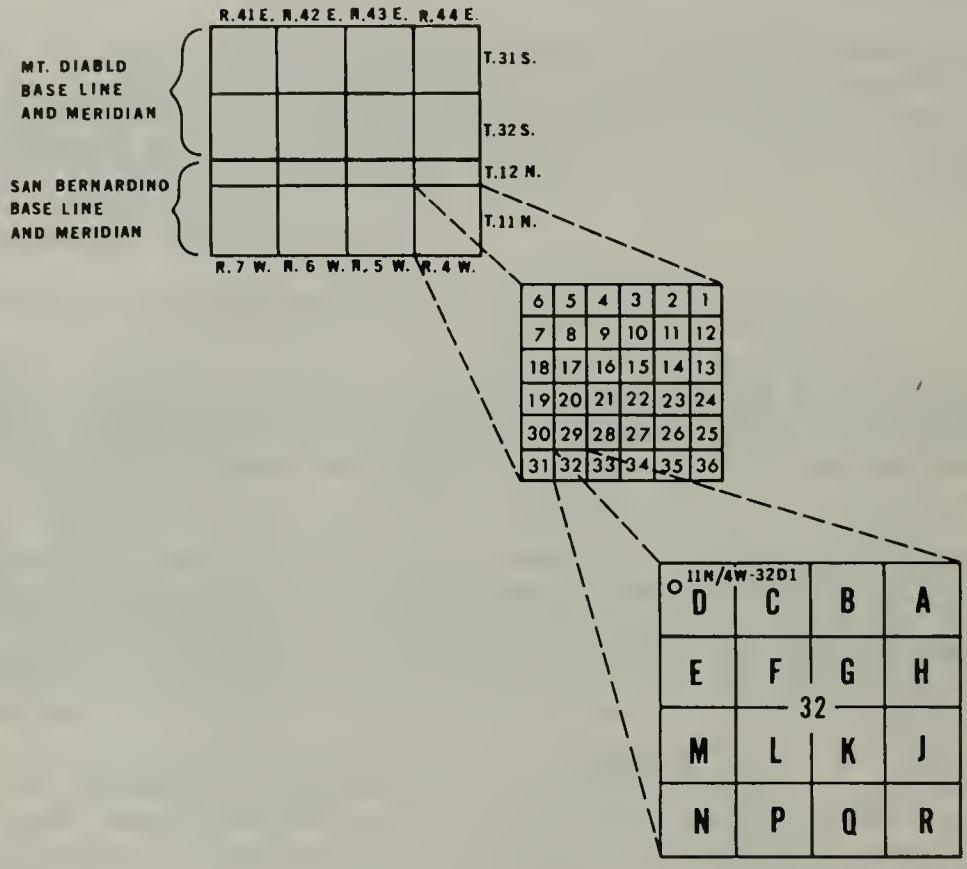
The general objective of the investigation is to collect and tabulate all available ground-water data for the individual desert basins in order to provide public agencies and the general public with data for overall ground-water investigation of the area and for planning water utilization and development work.

The scope of the work includes: (1) brief reconnaissance of major geologic features to determine the extent and general character of the deposits that contain ground water; (2) field examination of most water wells and springs in the area to determine their location with respect to the geographic and cultural features and the public-land net and to record well depths and sizes, types and capacities of pumping equipment, uses of the water, and other pertinent information available at the well site; (3) measurement of the depth to water below land surface; (4) selection of representative wells to be measured periodically to detect and record changes of water level; and (5) collection and tabulation of well records, including well logs, water-level measurements, chemical analyses, and pumping-test data.

The work was done intermittently in 1968 and 1969 by the Water Resources Division of the Survey, under the general supervision of R. Stanley Lord, district chief for California, and under the immediate supervision of L. C. Dutcher and J. L. Cook, successive chief of the Garden Grove subdistrict.

Well- and Spring-Numbering System

Wells and springs are numbered according to their location in the rectangular system for the subdivision of public land. For example, in the number 11N/4W-32D1, the part of the number preceding the slash indicates the township (T. 11 N.), the part between the slash and the hyphen indicates the range (R. 4 W.), the number between the hyphen and the letter indicates the section (sec. 32), and the letter indicates the 40-acre subdivision of the section. Within the 40-acre tract wells are numbered serially, as indicated by the final digit. Thus, well 11N/4W-32D1 is the first well to be listed in the NW¼NW¼ sec. 32, T. 11 N., R. 4 W., San Bernardino base line and meridian as shown in the diagram below:



Where a Z has been substituted for the letter designating the 40-acre tract, the Z indicates that the well is plotted from unverified location descriptions; the indicated sites of such wells were visited, but no evidence of a well could be found. On maps most wells and springs are identified by the letter designation and final digit. Some wells show the section number as well as the letter designation and final digit. These wells were previously located correctly with relation to cultural features but were not numbered correctly because of improperly projected land net. These wells have retained their original well number so that old published well data can be used.

Springs are numbered similarly except that an S is placed between the 40-acre subdivision letter and the final digit as shown in the following spring number: 28S/45E-32LS1.

WATER WELLS IN THE HARPER, SUPERIOR, AND CUDDEBACK VALLEY AREAS, SAN BERNARDINO COUNTY, CALIFORNIA

By W. R. Moyle, Jr.

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GENERAL FEATURES

The Harper, Superior, and Cuddeback Valley areas cover about 1,440 square miles and include all of Superior and Cuddeback Valleys and most of Harper Valley. Data for the southern part of Harper Valley is contained in Bulletin 91-3 (Page and Moyle, 1960).

The area is in the southwestern part of the Mojave Desert Region between long 116°45' and 117°40' and lat 35°00' and 35°30'. The western boundary coincides with the Kern-San Bernardino County line.

Access to the area is by U.S. Highways 466 and 395 and many paved and unpaved roads. The principal towns in the area are Atolia, Goldstone, and Red Mountain. Towns just outside the area include Barstow, Hinkley, Randsburg, Beechers Corners, and Johannesburg.

Economic development in the Harper, Superior, and Cuddeback Valleys is divided into four main groups, military, mining, farming, and commerce. The northern part of the area is used by the U.S. Navy as part of a test facility for research and development of armament. On the east side of Cuddeback Valley an area of 12 square miles is used by the U.S. Air Force as an air-to-ground gunnery range. Mining was mainly for tungsten and gold near Atolia, Red Mountain, and Goldstone; however, the boom was in 1916. Some tungsten ore is now being mined at Atolia.

The only farming is presently centered at the Lockhart Ranch in Harper Valley. The area irrigated was 1,800 acres in 1953, 2,300 acres in 1955, and 2,520 acres in 1968. The principal crop is alfalfa. An attempt to raise crops in Superior Valley was made between 1918 and 1920, but by 1920 most of the crops had failed. Commerce is concentrated along the main highways and is based principally on travelers.

Surface drainage of the area is into closed basins. Infrequent runoff reaches the playa areas in the valleys and either percolates into the ground or evaporates.

The Harper, Superior, and Cuddeback areas are shown on all or parts of the following U.S. Geological Survey topographic maps: Fremont Peak, Opal Mountain, Lane Mountain, Cuddeback Lake, Pilot Knob, and Goldstone Lake at a scale of 1:62,500 and the Red Mountain quadrangle at a scale of 1:24,000.

The desert regions of California are characteristically regions of nearly barren mountain ranges and isolated hills surrounding broad valleys that are underlain by alluvial deposits. The valley areas generally contain ground water that has a wide range in chemical quality, but much of the water can be, and has been, developed for beneficial use.

GEOLOGIC AND HYDROLOGIC FEATURES OF THE AREA

Geologic Units and Their Water-Bearing Character

The geologic units in the Harper, Superior, and Cuddeback Valley areas are divided into two main groups, the consolidated rocks and the unconsolidated deposits. The formations within these groups have dissimilar water-bearing characteristics, but, in general, the unconsolidated deposits of Quarternary age are more porous and permeable than the consolidated rocks of pre-Tertiary and Tertiary and Quarternary age. The unconsolidated deposits generally underlie the valleys and contain most of the ground water stored in the area. The consolidated rocks form the mountains and hills, surround the valley areas, underlie the unconsolidated deposits, and form the sides and bottoms of the ground-water basins. The consolidated rocks, for all practical purposes, are impermeable, but are important because they form the mountains and hills which receive the major part of the precipitation within the drainage area. It is the runoff from these mountains and hills that contributes most of the recharge to the ground-water body contained in the unconsolidated deposits. In the following paragraphs, the geologic units are described with special reference to their water-bearing characteristics.

The oldest unit in the area is the basement complex, of pre-Tertiary age, which consists of igneous and metamorphic rocks, undifferentiated, principally quartz monzonite, diorite, slate, phyllite, quartzite, granodiorite, quartz diorite, hornblend diorite, marble, quartz latite, basalt porphry, quartz, aplite, and pegmatite. The basement complex is generally impermeable except in fractures and weathered zones that yield small quantities of water.

The volcanic rocks, of Tertiary age, are composed of undifferentiated intrusive and extrusive rhyolite, andesite, tuff, tuff breccia, basalt, obsidian, pumice, and perlite. In places, this unit is interbedded with the continental sedimentary rocks. Some wells drilled into this unit yield small quantities of poor-quality water.

The continental sedimentary rocks, of Tertiary age, consist of moderately to well-bedded, moderately to very steeply dipping beds of sandstone, conglomerate, fanglomerate, breccia, limestone, chert, and water-laid tuff with some clay and shale. Rocks of this unit yield little water to wells and springs. The water is usually of fair quality.

The basalt flows, of Pleistocene age, overlie the older alluvial deposits in parts of the area, and in other parts rest directly on Tertiary or pre-Tertiary units. In all places the basalt is unconformable with the underlying material, lies above the regional water table, and is not considered an aquifer.

The older alluvium, of Pleistocene age, underlies most of the valley-floor areas and is commonly overlain by a veneer of younger material. The older alluvium consists mainly of moderately sorted sand and some gravel, silt, and clay. It is oxidized and generally unconsolidated, but in some places it is slightly cemented. This unit is porous and permeable, extends below the water table, yields water freely to wells, and is the principal water-bearing unit in the area.

The older fan deposits, of Pleistocene age, are composed of moderately indurated and moderately well-bedded gravel, boulders, and sand derived from the granitic and metamorphic rocks and, where saturated, yield water to wells.

The older lake deposits, of Pleistocene age, consist of clay, silt, and sand. These deposits crop out only in a small area along the Lockhart fault and are unimportant as a source of water.

The younger alluvium, of Holocene age, consists of sand with small quantities of gravel, silt, and clay. Deposition of this material is still taking place in the valley areas during infrequent times of streamflow. This unit is permeable and, where saturated, will yield water to wells. It is very thin and is not an important water-bearing unit, because it generally lies above the water table. However, it does transmit precipitation and water from the intermittent streams to the ground-water body.

The playa deposits, of Holocene age, are composed of clay, silt, and sandy clay, with various quantities of soluble salts. Of the eight playas shown, only Harper Lake has areas of discharging ground water. The water levels beneath this playa, which are at or near land surface, allow water to evaporate into the air, leaving a residue of salt. The water from many wells and springs near the playa has a high concentration of dissolved solids. Many of the playa deposits may yield small quantities of water, but the quality ranges from fair to very poor, depending on the source area and on quality requirements related to intended use of the water.

The windblown sand, of Holocene age, is composed of actively drifting fine to medium sand, ranging from a few feet to more than 25 feet in thickness. In parts of the area the sand may be saturated, but generally it is above the regional water table.

Recharge and Discharge of Ground Water

Recharge to the ground-water body occurs by direct infiltration of rain and runoff, and by subsurface flow from the adjoining areas. In the Cuddeback Valley area ground water moves eastward across the ground-water barrier toward Cuddeback Lake. The water table under Cuddeback Lake is flat which indicates that very little water is discharging by subsurface flow from the valley. The probable discharge is southeastward toward Harper Valley. In Superior Valley the ground water moves southward toward Superior Lake. Under Superior Lake the water table is flat, and the direction of water movement is not known. In Harper Valley water moves toward Harper Lake. The main recharge to Harper Valley is underflow from the Mojave River by way of Hinkley Valley (Page and Moyle, 1960), south of Black's Ranch, and south of the mapped area. Harper Lake is the only playa in the mapped area that is discharging at land surface. Discharge occurs around Black's Ranch and along the southwest edge of the playa, northeast of Lockhard Ranch.

Geophysical Investigations

Water-level measurements indicated a ground-water barrier about 4 miles west of Cuddeback Lake. This barrier caused a head change of about 150 feet from one side of the barrier to the other, with the high head on the west side. This barrier is caused by faulting which shows on aerial photographs in secs. 12 and 23, T. 30 S., R. 41 E., and in secs. 6 and 7, T. 30 S., R. 42 E. Because of the approximate location of the ground-water barrier and the extension of the Gravel Hills fault, seven geophysical lines were run to locate the faults. The interpretation of the location of the faults from these geophysical data is shown on the maps. The data are on file at the U.S. Geological Survey, Water Resources Division, Garden Grove subdistrict office.

The geophysical lines include both gravity profiles and magnetic profiles. Line E, a gravity profile, indicated the anomaly is approximately 0.2 mile wide. Line D showed the gravity anomaly is 0.2 mile wide, while the magnetic profiles show the anomaly is 0.3 mile wide. Line C shows the gravity anomaly to be 0.07 mile wide.

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_____1929, The Mohave Desert region, California: U.S. Geol. Survey Water-Supply Paper 578, 759 p.

Waring, G. A., 1915, Springs of California: U.S. Geol. Survey Water-Supply Paper 338, 410 p.

TABLE 1.--*Description of wells*

[Boxhead explanations are abstracted from U.S. Geological Survey "Instructions for Using the Punch-Card System for the Storage and Retrieval of Ground-Water Data"]

State well number: The wells are identified according to their location in the rectangular system for the subdivision of public land. The identification consists of the township number, north or south; the range number, east or west; and the section number. The section is further subdivided into sixteen 40-acre tracts lettered consecutively (excepting I and O), beginning with A in the northeast corner of the section and progressing in a sinusoidal manner to R in the southeast corner. Wells within the 40-acre tract are numbered sequentially. The base line and meridian are indicated by the final letter, as follows: H, Humboldt: M, Mount Diablo; S, San Bernardino.

Owner or user: The apparent owner or user on the date indicated. In some cases, the local name of the well is given.

Ownership:

- C County
- F Federal Government
- M City, town, or unincorporated village
- N Corporation or company, churches, lodges, and other nonprofit, nongovernment groups
- P Private
- S State agency
- W Water district.

Use of water:

- A Air conditioning
- B Bottling
- C Commercial
- D Dewatering
- E Power generation
- F Fire protection
- H Domestic
- I Irrigation
- N Medicinal
- M Industrial, including mining
- P Public supply
- R Recreation
- S Stock supply
- T Institutional
- U Unused
- V Repressurization
- W Recharge
- X Desalination, public supply
- T Desalination, other use
- Z Other.

Use of well:

- A Anode
- D Drainage
- G Seismic hole
- H Heat reservoir
- O Observation
- P Oil or gas
- R Recharge
- T Test hole
- U Unused
- W Withdraw water
- X Waste disposal
- Z Destroyed.

Well data: In tabulation below, C, complete data; N, no data; P, partial data. Complete physical data include depth, diameter, and finish. Complete geologic data include lithology and aquifer thickness. Complete water-level data include altitude of land-surface datum, in feet above mean sea level; water level, in feet above(+) or below land-surface datum; and date of measurement. Complete yield data include rate of pumping and drawdown.

Code symbol	1	2	3	4	5	6	7	8	9	0
Physical	C	C	P	C	C	P	C	C	P	P
Geologic	C	C	P	C	C	N	C	N	P	N
Water level	C	C	C	N	N	P	P	C	C	N
Yield	C	N	C	C	N	P	C	N	N	P

Chemical analyses:

- C Complete
- G Dissolved gases
- J Conductance and chloride
- K Conductance
- L Chloride
- M Multiple (complete and one or more partials)
- P Partial
- R Radiochemical (plus partial or complete chemical)
- S Special (tritium, carbon-14, and all other special determinations)
- T Trace elements (spectrographic).

Log data:

- A Drilling-time
- B Casing-collar
- C Caliper (diameter) survey
- D Driller's
- E Electric
- F Fluid-conductivity or fluid-resistivity
- G Geologist or sample
- H Magnetic
- I Induction
- J Gamma-ray
- K Dipmeter or directional (inclinometer) survey
- L Laterolog
- M Microlog
- N Neutron
- O Microlaterolog
- P Photographic
- Q Radioactive-tracer
- R Radiation (includes both neutron and gamma-ray)
- S Sonic
- T Temperature
- U Temperature and fluid-conductivity (resistivity)
- V Fluid-velocity
- W Electric and radiation
- X Electric, radiation, caliper, and fluid-velocity
- Y Electric, radiation, and sample (or driller's)
- Z Electric, radiation, temperature, and fluid-conductivity.

Depth of well: Depth, in feet below land-surface datum, as reported by owner, driller, or others, or as measured by the Geological Survey.

Depth cased: Length of casing, in feet below land-surface datum, to the top of the first perforations.

Diameter: Inside diameter of the well, in inches; nominal inside diameter, in inches, of the innermost casing at the surface for drilled cased wells.

Well finish:

- O Porous concrete
- F Gravel wall, perforated or slotted casing
- G Gravel wall, commercial screen
- H Horizontal gallery or collector
- O Open end
- P Perforated or slotted casing
- S Screen
- T Sand point
- W Walled or shored
- X Open hole in aquifer (generally cased to aquifer)
- Z Other.

Method drilled:

- A Rotary
- B Bored or augered
- C Cable-tool
- D Dug
- H Hydraulic-rotary
- J Jetted
- P Air percussion
- R Reverse-rotary
- T Trenching
- V Driven
- W Drive-wash
- Z Other.

Lift type:

- A Air
- B Bucket
- C Centrifugal
- J Jet
- L Multiple (centrifugal)
- M Multiple (turbine)
- N None
- P Piston
- R Rotary
- S Submergible
- T Turbine
- Z Other.

Power:

1 Hand

2 Natural gas engine
- A 0-20 hp
- B >20-50
- C >50-100
- D>100-200
- E >200

3 Gasoline engine
- F 0-5 hp
- G >5-20
- H >20-50
- J >50-100
- K >100-200
- L >200

4 Diesel engine
- M 0-50 hp
- N >50-150
- P>150-400
- Q>400-750
- R >750

5 Electric motor
- S 0-1 hp
- T >1-5
- U >5-15
- V>15-100
- W >100

6 Wind

7 LP gas engine (propane or butane)
- A 0-20 hp
- B >20-50
- C >50-100
- D>100-200
- E >200

8 Other.

Altitude of lsd: Altitude of land-surface datum, in feet, above mean sea level. Land-surface datum is an arbitrary plane closely approximating land surface at the time of the first measurement and used as the plane of reference for all subsequent measurements.

Water level: Depth to water, in feet, above(+) or below land-surface datum.

Date measured: Month and year of the water-level measurement; other data given generally apply for this date.

Yield of well: Yield, in gallons per minute; drawdown, in feet.

State well number	Owner or user	Ownership	Use of water	Use of well	Well data	Chemical analyses	Log data	Depth of well (feet below lsd)	Depth cased (feet below lsd)	Diameter (inches)	Well finish	Method drilled	Year drilled	Lift type	Power	Altitude of lsd (feet)	Water level (feet below lsd)	Date measured	Yield of well: Gallons per minute	Yield of well: Drawdown (feet)
28S/45E-26Z01M	U.S.NAVY	F		Z			D						1952	N		2730		8-68		
29S/43E-35C01M		P	U	U				10		48	X	D		N		3680	8	8-68		
30S/41E-12R01M	ORO GRANDE MINE	N	N	W				310		12	F	H	1967	M	G	2660		8-68		
30S/41E-13H01M	BLACKHAWK WELL	P	U	U				171		10		D		N		2650	149	7-68		
30S/41E-13Q01M			U	U				424		16				S		2710	192	7-68		
30S/41E-19F01M	MINES EXPL.INC	N	N	W								D				3325	1200	8-69		
30S/41E-21P01M	MINES EXPL.INC	N	N	W		C		677				H	1969	T	E	3060	358	11-69	75	
30S/41E-22J01M				Z				229		12	F			N		2925	DRY	8-69		
30S/41E-22J02M	MINES EXPL.INC	N	U	U				598	398	7		H	1968	N		2925		8-69		
30S/41E-26R01M				Z				120		72		D		N		2790	DRY	7-68		
30S/41E-27M01M			U	U				267		10				N		2940	256	8-68		
30S/41E-36G01M	MONOLITH	N	U	U		C				10				P		2747	237	7-68		
30S/42E-04E01M		N	U	U				203		12				N		2615	107	8-68		
30S/42E-05K01M		P	U	U				168		12				N		2630	123	8-68		
30S/42E-05L01M	BROWNS RANCH	P		Z				112		48	X	D		N		2635	DRY	8-68		
30S/42E-05P01M				Z				3		60		D		N		2650	DRY	8-68		
30S/42E-07H01M		P	U	U				141		48	X	D		N		2650	140	8-68		
30S/42E-07M01M				Z				154		48	X	D		N		2620	DRY	8-68		
30S/42E-08M01M		P		Z				106		48	X	D		P		2627	DRY	8-68		
30S/42E-10L01M		P	U	U						12				P	6	2580	71	8-68		
30S/42E-11F01M		P	U	U				158		12				N		2620	112	8-68		
30S/42E-11F02M		P	U	U				134		12				N		2620	113	8-68		
30S/42E-12F01M		P	S	W		C				12				P	6	2695	184	8-68		
30S/42E-17A01M		P		Z				33		10				N		2575	DRY	8-68		
30S/42E-17D01M				Z				85		36	X	D		N		2600	DRY	7-68		
30S/42E-17N01M			U	U				300		12				M		2600		7-68		
30S/42E-17N02M			U	U						12				N		2595		7-68		
30S/42E-18A01M				Z				100		48	X	D		N		2620	DRY			
30S/42E-18C01M				Z				30		10				N		2625	DRY	7-68		
30S/42E-18P01M			U	U				278		10				N		2624	116	7-68		
30S/42E-18Q01M			U	U						12				M		2650		7-68		
30S/42E-18R01M			U	U		C				10				M		2635	99	7-68		
30S/42E-19A01M			U	U				300		12				M		2610		7-68		
30S/42E-20D01M			U	U						12				N		2600	90	7-68		
30S/42E-20D02M			U	U				300		12				N		2600	92	7-68		
30S/42E-20J01M	MINES EXPL.INC	N	U	U		C										2565		7-68		
30S/42E-20K01M	MINES EXPL.INC	N	U	U		C				12				M		2565	52	7-68		
30S/42E-21N01M				Z				0						N		2560		7-68		
30S/42E-21N02M				Z				50		60	X	D		N		2555	DRY	8-68		
30S/42E-22A01M				Z		C		29		60	X	D		N		2554	DRY	8-68		
30S/42E-24L01M		P	S	W		C				12				P	6	2656	150	8-68		
30S/42E-32M01M		P		Z				105		43	X	D		N		2616	DRY	8-69		
30S/43E-02D01M	BLACKWATER WELL	P	S	W		C				10		D		P	6	3520		8-68		
30S/43E-02D02M	J.MANDENBURU	P	U	U				260		4				S	S	3520		8-68		
30S/43E-32N01M	U.S.AIR FORCE	F	H	W		M	D	429	229	10			1957	P	T	2840	327	8-68		
30S/44E-02B01M	U.S.NAVY	F	S	W				53		7		D		P	6	4160	51	8-68		
30S/44E-02G01M	U.S.NAVY	F	S	W						8				P	F	4140		8-68		
30S/44E-35E01M	U.S.NAVY	F	S	W		C		146		8				S	S	3451	P 86	8-68		
30S/45E-05E01M	U.S.NAVY	F	S	W		C						D		Z		4030	FLOW	8-68		
30S/45E-05K01M	U.S.NAVY	F	S	W						8			1963	P	6	3840		8-68		
30S/45E-09H01M	U.S.NAVY	F	S	W						10			1949	P	6	3420	155	8-68		
30S/45E-14A01M	U.S.NAVY	F		Z			D	83		8			1916	N		3200	DRY	8-68		
30S/45E-24P01M	U.S.NAVY	F		Z			D	3		72		D	1916	N		3100	DRY	8-68		
30S/45E-26Q01M	U.S.NAVY	F		Z				153		48	X	D	1917	N		3095	DRY	8-68		
30S/45E-35P01M		P	U	U						10				P		3062		8-68		
30S/46E-19M01M	U.S.NAVY	F		Z			D	4						N		3110	DRY	8-68		
31S/41E-08B01M		P		Z				27		6				N		2979	DRY	8-69		
31S/41E-10N01M				Z				124		66	W	D		N		3095	DRY	7-68		
31S/41E-31N01M	JAMESON RANCH	P		Z		C	D	0					1943	N		2775		7-68		
31S/41E-33M01M				Z				97		8				N		2797	DRY	7-68		

State well number	Owner or user	Ownership	Use of water	Use of well	Well data	Chemical analyses	Log data	Depth of well (feet below lsd)	Depth cased (feet below lsd)	Diameter (inches)	Well finish	Method drilled	Year drilled	Lift type	Power	Altitude of lsd (feet)	Water level (feet below lsd)	Date measured	Yield of well	
																			Gallons per minute	Drawdown (feet)
31S/41E-34M01M	FREMONT STATION			Z									1909	N		2830		7-68		
31S/42E-05R01M		P	U	U				54		10				P	6	2555	52	7-68		
31S/42E-16A01M				Z				8		140	X	D		N		2560	DRY	7-68		
31S/42E-23L01M				Z		P		108		8				N		2685	DRY	9-68		
31S/42E-30M01M	HAMBURGER MILL	P		Z				136		10				N		2710	DRY	7-68		
31S/43E-30M02M	HAMBURGER MILL	P		Z				5		10				N		2705	DRY	7-68		
31S/45E-01C01M	SEABURGS WELL	P	U	U				142		8				P		3040	118	8-68		
31S/45E-01Z01M		P		Z				0					1917	N		3040		8-68		
31S/45E-12A01M		P		Z				84		12			1916	N		3017	DRY	8-68		
31S/45E-14L01M	SLUCUM WELL	P		Z			D	80		48	X	D		N		3015	DRY	8-68		
31S/45E-15J01M		P	U	U				116		12				N		3034	108	8-68		
31S/45E-24Q01M		P		Z		C		106		10				N		3026	DRY	8-68		
31S/45E-24Z01M		P		Z				0						N		3020		8-68		
31S/45E-30F01M		P		Z				20		72	X	D		N		3060	DRY	8-68		
31S/46E-02M01M		P	U	U		C	D	101		8			1915	N		3020	100	8-68		
31S/46E-05Z01M		P		Z				0						N		3040		8-68		
31S/46E-06J01M		P	U	U				276		12		C		N		3035	109	8-68		
31S/46E-07A01M		P		Z				0		6				N		3030		8-68		
31S/46E-07P01M		P		Z				83		8				N		3020	DRY	8-68		
31S/46E-12P01M				Z				0		8				N		3004		8-68		
31S/46E-13C01M				Z				25		72	X	D		N		3000		8-68		
31S/46E-14K01M		P	U	U				205		12				N		3010	92	8-68		
31S/46E-16J01M		P	U	U		C		228		14			1953	N		3011	93	8-68		
31S/46E-16N01M		P	U	U				358		14				N		3005	91	8-68		
31S/46E-18Z01M				Z				0						N		3025		8-68		
31S/46E-19J01M		P		Z			D	101		8				N		3015	DRY	8-68		
31S/46E-19J02M				Z				88		72		D		N		3015	DRY	8-68		
31S/46E-19M01M		P	U	U			D	118		8				N		3020	104	8-68		
31S/46E-19R01M		P		Z			D	66		8				N		3020	DRY	8-68		
31S/46E-21A01M		P		Z				0					1916	N		3016		8-68		
31S/46E-21M01M	CRUTTS WELL	P		Z		C	D	10		8				N		3042	DRY	8-68		
31S/46E-22R01M		P		Z				47		48	X	D		N		3045	DRY	8-68		
31S/46E-23R01M		P		Z				1				D		N		3065		8-68		
31S/46E-24M01M		P		Z				16		48	X	D		N		3060	DRY	8-68		
31S/47E-05R01M	AUSLAND WELL	P		Z		C		2		8				N		3113		8-68		
31S/47E-06N01M			U	U				118		72	X	D		N		3030	118	8-68		
32S/41E-10N01M				Z				56		72	X	D		N		2785	DRY	7-68		
32S/41E-15J01M	MONOLITH	N	U	U		C	D	305		10			1946	P		2745	203	7-68		
32S/43E-05J01M		P		Z				134		14				N		2520	DRY	8-68		
32S/43E-28K01M	MCDONALD WELL	P	S	W		C		11		60	W	D		Z		2277	10	7-68		
32S/44E-11G01M		P	U	U				17		72	C	D		N		2885	9	8-68		
32S/45E-24R01M	MURPHYS WELL		Z					18		60	W	D		N		2910	DRY	7-68		
32S/47E-20R01M	MOJAVE PLACER	P	N	W		C		368		10			1938	P	6	3475	115	8-68		
32S/47E-21P01M	WILLIAMS WELL	P	U	U		C		92		72	X	D		N	6	3493	85	8-68		
32S/47E-34D01M	LANE WELL	P		Z		C		25		60	W	D		N		3440	DRY	8-68		
32S/47E-34D02M		P		Z				20		60	W	D		N		3420	DRY	8-68		
32S/47E-34E01M	W.C.NOBLE	P	H	W				11		48		D	1947	N		3480	11	8-68		
11N/02W-20F01S		P		Z				0								2540		8-69		
11N/03W-04C01S		P		Z				6		60		D		N		2130	DRY	7-68		
11N/03W-07D01S		P	U	U				126		12				N		2065	65	7-68		
11N/03W-07E01S				Z				0						N		2450		7-68		
11N/03W-07M01S		P		Z				0		72		D		N		2450		7-68		
11N/03W-07R01S		P	H	W						4						2040	26	7-68		
11N/03W-07Z01S				Z												2060		7-68		
11N/03W-07Z02S				Z				0								2045		7-68		
11N/03W-07Z03S				Z												2040		7-68		
11N/03W-08G01S			U	U				110		12				N		2075	52	7-68		
11N/03W-08N01S	P.C.BORAX CO	N	U	U			D	1117		8			1949	N		2040	17	7-68		
11N/03W-15C01S				Z				85		72		D				2190	DRY	5-55		
11N/03W-15D01S	E.LOCK	P	I	W				235		10	F	C		M	U	2155	P128	7-68		

State well number	Owner or user	Ownership	Use of water	Use of well	Well data	Chemical analyses	Log data	Depth of well (feet below lsd)	Depth cased (feet below lsd)	Diameter (inches)	Well finish	Method drilled	Year drilled	Lift type	Power	Altitude of lsd (feet)	Water level (feet below lsd)	Date measured	Yield of well: Gallons per minute	Yield of well: Drawdown (feet)
11N/03W-15E01S	E.LOCK	P	H	W				150		8		C	1954		3	2140		7-68		
11N/03W-15E02S	E.LOCK	P	I	W				185		8		C		M	N	2155	121	7-68		
11N/03W-15F01S	W.B.COLLIE	P	I	W				228		10	F	C	1957	M	V	2170		7-68		
11N/03W-16M01S		P	H	W						8				M	3	2080		7-68		
11N/03W-16Z01S				Z				0						N		2125		7-68		
11N/03W-17J01S		P	U	U						8		C		N		2060	41	7-68		
11N/03W-18Z01S	J.G.HASKINS	P														2030	10	19		
11N/03W-19801S		P	U	U				80		10				N		2030	7	8-69		
11N/03W-19J01S				Z				3				D				2030		5-55		
11N/03W-20J01S		P	H	W				150		8				S	U	2055	25	7-68		
11N/03W-20N01S		P		Z		C		0		8		D		N		2040		7-68		
11N/03W-20P01S			U	U				187		12				N		2050	22	7-68		
11N/03W-20R01S		P	U	U				100		8				N		2050	20	7-68		
11N/03W-21L01S	HOVATER	P	I	W				116		10	F	C	1966	M	U	2065		7-68		
11N/03W-21L02S	HOVATER	P	I	W				85	45	10	F	C	1962	M	T	2065		7-68		
11N/03W-21N01S		P	H	W						6				J	5	2050		7-68		
11N/03W-21N02S		P	U	U				35			X	C		N		2055	32	7-68		
11N/03W-21R01S		P	U	U				194		12	F	H	1954	N		2080	61	7-68		
11N/03W-23N01S		P		Z			D	50		12		H	1956	N		2180	DRY	7-68		
11N/03W-27E01S				Z				0		48		D		N		2080	DRY	7-68		
11N/03W-27L01S		P		Z				58		60		D		N		2105	DRY	7-68		
11N/03W-27N01S			Z					6		24				N		2075	DRY	7-68		
11N/03W-27N02S		P		Z				4		48		D		N		2075	DRY	7-68		
11N/03W-28F01S		P	H	W										M	3	2055		7-68		
11N/03W-28H01S		P		Z				37		12				N		2079	DRY	7-68		
11N/03W-28H02S				Z				4		6				N		2078	DRY	7-68		
11N/03W-28J01S				Z				0		7				N		2080		7-68		
11N/03W-28R01S	RAINBOW RANCH	P	U	U								D		N		2074		7-68		
11N/03W-28R02S		P	U	U		C		243		12				N		2075	40	7-68		
11N/03W-29P01S		P		Z				4				D		N		2045	DRY	7-68		
11N/03W-30A01S	BLACKS RANCH	P	U	U		C		5		6				N		2031	3	7-68		
11N/03W-30A02S	BLACKS RANCH	P	U	U				13		8				N		2033	2	7-68		
11N/03W-33H01S		P	U	U		C		165		12			1951	N		2075	40	7-68		
11N/03W-33H02S	R.C.CLARK	P	I	W				295		12	F			M	V	2080	32	7-68		
11N/03W-34F01S		P		Z				39		72		D		T		2085	DRY	7-68		
11N/03W-34G01S		P		Z				50		72	W	D		N		2100	DRY	7-68		
11N/04W-01N01S	WHITEHOUSE WELL	P		Z				18		12				N		2074	DRY	7-68		
11N/04W-03C01S				Z				0		48		D		N		2040		7-68		
11N/04W-03H01S		P	U	U				262		16	F	H	1957	M		2080	122	7-68		
11N/04W-04J01S	W.W.PORTER	P	U	U				363	124	16	F		1960	M		2040	79	7-68		
11N/04W-04M01S	R.L.TRIPPLETT	P	U	U			D	31		36			1950	N		2035	28	7-68		
11N/04W-04R01S		P	U	U				39		8				N		2036	38	7-68		
11N/04W-05H01S		P		Z				3			W	D				2035		7-68		
11N/04W-06E01S		P	U	U				63		12				N		2045	43	7-68		
11N/04W-06L01S		P	U	U				41		12				N		4035	30	7-68		
11N/04W-06M01S		P	U	U				68		12				N		2040	66	7-68		
11N/04W-07E01S		P		Z				15						N		2030	DRY	3-55		
11N/04W-10C01S		P		Z				0		36		D		N		2040		7-68		
11N/04W-12G01S		P		Z				1		12				N		2055		7-68		
11N/04W-12H01S		P	U	U				58		12				N		2050	56	7-68		
11S/04W-15A01S		P	U	U				42		12				N		2025	20	7-68		
11N/04W-18C01S		P		Z				49		8				P		2035		7-68		
11N/04W-18Z01S	ESTELLA SAECKER	P						105								2030	25	19		
11N/04W-19D01S	LOCKHART RANCH	P	I	W				391	200			R	1968	M	V	2050		7-68		
11N/04W-19E01S		P	U	U		C		500		12			1951	N		2060		7-68		
11N/04W-19E02S	LOCKHART RANCH	P	I	W										M	W	2055		7-68		
11N/04W-19F01S	LOCKHART RANCH	P	I	W				500		14	F		1951	M	V	2050		7-68		
11N/04W-19G01S	LOCKHART RANCH	P	I	W			D	500		16	F	H	1951	M	V	2045	153	7-68		
11N/04W-19H01S	M.J.WATSON	P	H	W		C		210		10			1936	S	T	2039	134	7-68		
11N/04W-19H02S	M.J.WATSON	P	S	W						8			1954	S	V	2040	140	7-68		

State well number	Owner or user	Ownership	Use of water	Use of well	Well data	Chemical analyses	Log data	Depth of well (feet below lsd)	Depth cased (feet below lsd)	Diameter (inches)	Well finish	Method drilled	Year drilled	Lift type	Power	Altitude of lsd (feet)	Water level (feet below lsd)	Date measured	Yield of well: Gallons per minute	Yield of well: Drawdown (feet)
11N/04W-19K01S	LOCKHART RANCH	P	I	W						12				M	W	2050		7-68		
11N/04W-19L01S	LOCKHART RANCH	P	H	W			D	350		8	G	H	1951	S	S	2055		7-68		
11N/04W-19N01S	LOCKHART RANCH	P	I	W						12				M	V	2075		7-68		
11N/04W-19P01S	LOCKHART RANCH	P	U	U				468		16	F	H	1951	N		2065	190	7-68		
11N/04W-19Q01S	LOCKHART RANCH	P	I	W						14				M	V	2055		7-68		
11N/04W-19K01S	OURHAM	P	H	W										M	U	2044		7-68		
11N/04W-19R02S		P	H	W						7				S	S	2045		7-68		
11N/04W-19Z01S	E.H.BENSON	P						150								2045	53	19		
11N/04W-20E01S	G.D.SHELTO	P	H	W		C		270						M	T	2035		7-68		
11N/04W-23C01S		P		Z			D	0						N		2020		7-68		
11N/04W-27A01S		P		Z			D	0		7			1952	N		2020		8-68		
11N/04W-28N01S	DIMMIT	P	U	U		C		350		10			1918	N		2040		7-68		
11N/04W-28N02S	DIMMIT	P	U	U				15		12			1917	N		2040	13	7-68		
11N/04W-28Q01S		P	U	U				215		13		D		N		2035	125	7-68		
11N/04W-29D01S	LOCKHART RANCH	P	I	W				200						T	V	2045		7-68		
11N/04W-29J01S	LOCKHART RANCH	P	I	W										M	V	2030		7-68		
11N/04W-29N01S	LOCKHART RANCH	P	I	W										M	V	2065		7-68		
11N/04W-29Q01S	LOCKHART RANCH	P	H	W						8				S	S	2055		7-68		
11N/04W-29R01S	LOCKHART RANCH	P	U	U				303		12			1952	N		2045	134	7-68		
11N/04W-30C01S		P		Z				151		14			1933	J	T	2065		7-68		
11N/04W-30C02S		P	U	U				11		72		D		N		2065	10	7-68		
11N/04W-30D01S	LOCKHART RANCH	P	I	W				500		14			1951	T	V	2080		7-68		
11N/04W-30E01S	LOCKHART RANCH	P	I	W		C		588		12	F			M	V	2090		7-68		
11N/04W-30J01S	LOCKHART RANCH	P	H	W						12				S	S	2060		7-68		
11N/04W-30N01S	LOCKHART RANCH	P	I	W		C		500		14	F		1951	M	V	2095		7-68		
11N/04W-30N02S	LOCKHART RANCH	P	I	W		C		500		16	F		1952	M	V	2100		7-68		
11N/04W-30N03S	LOCKHART RANCH	P		Z				0						N		2100		7-68		
11N/04W-30P01S	LOCKHART RANCH	P	U	U				415		20				N		2095	173	7-68		
11N/04W-30Q01S	LOCKHART RANCH	P	I	W				500		14				M	V	2085		7-68		
11N/04W-30Q02S	LOCKHART RANCH	P	I	W										M	V	2080		7-68		
11N/04W-30R01S	LOCKHART RANCH	P	U	U						8				M	V	2070		7-68		
11N/04W-30Z01S								108									60	19		
11N/04W-30Z02S								70								2055	30	19		
11N/04W-31A01S	FOX	P	S	W				295		12	F		1948	S	S	2076	167	7-68		
11N/04W-31H01S		P		Z		C		142		6				N		2076	ORY	7-68		
11N/04W-32A01S	DOMINICK VEIGA	P	I	W			D	425		14	F	H	1967	T	V	2050		7-68		
11N/04W-32C01S	CARLOS RAMIREZ	P	H	W						8			1953	S	S	2065		7-68		
11N/04W-32D01S	LOCKHART RANCH	P	I	W				500		14			1951	M	V	2075		7-68		
11N/04W-32D02S	LOCKHART RANCH	P	I	W			D	500		16	F	H	1951	M	V	2060	147	7-68		
11N/04W-32F01S	KALK	P	H	W				225		12	F		1949	S	S	2080	96	7-68		
11N/04W-32L01S		P	U	U		C	D	242		12			1925	S	S	2090	165	7-68		
11N/04W-32L02S		P	U	U											T	2090		7-68		
11N/04W-32M01S		P		Z				0		12				N		2095		7-68		
11N/04W-33B01S	MILTON MOST	P	I	W							F			M	V	2040		7-68		
11N/04W-33C01S	MILTON MOST	P	I	W							F			M	V	2040		7-68		
11N/04W-33D01S		P		Z				0					1951	N		2075		7-68		
11N/04W-33G01S	HALPER RANCH	P	I	W		C		310		10			1951	S	S	2060		7-68		
11N/04W-34B01S		P	U	U				5		24	C	D		N		2023	1	8-68		
11N/04W-34D01S		P		Z				0				D		N		2035		7-68		
11N/04W-35F01S		P		Z				26		12				N		2050	ORY	7-68		
11N/04W-35G01S		P		Z				13		7				N		2050	ORY	7-68		
11N/04W-35G02S		P		Z				29		12				N		2050	ORY	7-68		
11N/05W-01N01S		P	U	U				74		20	F			N		2060	73	7-68		
11N/05W-02B01S		P	U	U				155		84		D		N		2102	114	7-68		
11N/05W-02B02S		P		Z				111		84		D		N		2102	ORY	7-68		
11N/05W-02D01S		P		Z				0						N		2100		7-68		
11N/05W-07Z01S		P	U	U						12				N		2320	155	10-52		
11N/05W-12G01S		P	U	U				121		12				N		2055	85	7-68		
11N/05W-12M01S		P		Z				20		72	W	D		N		2070	ORY	7-68		
11N/05W-12Z01S	H.J.SAECKER							150								2055	25	19		

State well number	Owner or user	Ownership	Use of water	Use of well	Well data	Chemical analyses	Log data	Depth of well (feet below lsd)	Depth cased (feet below lsd)	Diameter (inches)	Well finish	Method drilled	Year drilled	Lift type	Power	Altitude of lsd (feet)	Water level (feet below lsd)	Date measured	Yield of well: Gallons per minute	Yield of well: Drawdown (feet)
11N/05W-13H01S	C.G.REED	P	U	U				286		14				N		2037	104	7-68		
11N/05W-13Q01S		P	U	U				182		24				N		2050	154	7-68		
11N/05W-14R01S		P		Z				14		10			1933	N		2065	DRY	7-68		
11N/05W-24A01S	LOCKHART RANCH	P	1	W				300		16			1938	M	V	2042		7-68		
11N/05W-24A02S	LOCKHART RANCH	P	U	U				250					1938			2055		7-68		
11N/05W-24E01S	LOCKHART RANCH	P	U	U				250		16			1938	M		2075		7-68		
11N/05W-24F01S	LOCKHART RANCH	P	1	W			D	367		14	F	H	1967	M	V	2070		7-68		
11N/05W-24G01S	LOCKHART RANCH	P	I	W		C		250					1938	M	V	2070		7-68		
11N/05W-24G02S	LOCKHART	P	1	W				475		14			1950	M	V	2065		7-68		
11N/05W-24H01S	LOCKHART RANCH	P	1	W				300		14			1938	M	V	2060		7-68		
11N/05W-24K01S	LOCKHART RANCH	P	I	W										M	V	2080		7-68		
11N/05W-24P01S	LOCKHART RANCH	P	1	W		C	D	430		16	F	H	1952	M	V	2100		7-68		
11N/05W-24Q01S	LOCKHART RANCH	P	1	W		C	D	536		16	F	H	1950	M	V	2090		7-68		
11N/05W-24R01S	LOCKHART RANCH	P	I	W		C				16			1952	M	V	2085		7-68		
11N/05W-24R02S	MADRO	P	H	W		C		262		8				S	S	2075	153	7-68		
11N/05W-28Z01S	MYRON T.KING	P		Z									1959	N		2386		7-68		
11N/05W-32A01S				Z				6				D		N		2360		7-68		
11N/06W-17L01S	U.S.AIR FORCE	F	U	U		C	D	618		10	F	H	1950	S	T	2560	287	8-68		
11N/06W-17P01S	U.S.AIR FORCE	F	U	U			D	597		10	F	H	1950	N		2570		8-68		
11N/06W-17P02S	U.S.AIR FORCE	F	U	U			D	647		10	F			N		2550	265	8-68		
11N/06W-17P03S	R.C.PHILLIPS	P		Z				0					1949	N		2560		7-68		
11N/06W-17P04S	R.C.PHILLIPS	P		Z				0					1949	N		2560		7-68		
11N/06W-18M01S	R.C.PHILLIPS	P		Z				0						N		2579		7-68		
11N/06W-18M02S	KERN CO LAND CO	N		Z				0					1958	N		2520		7-68		
11N/06W-18P01S	R.C.PHILLIPS	P		Z				0					1949	N		2578		7-68		
11N/06W-20A01S	U.S.AIR FORCE	F	U	U		C	D	452		24		H	1950	N		2535	249	7-68		
11N/06W-20P01S	PHILLIPS	P		Z				0					1949	N		2500		7-68		
11N/06W-20Z01S		P		Z			D	0						N		2535		7-68		
11N/06W-22E01S	KERR-MCGEE IND	N		Z			D	0					1958			2540		7-68		
11N/06W-24R01S	KERR-MCGEE IND	N		Z			D	0					1958	N		2430		7-68		
11N/06W-25E01S	KERR-MCGEE IND	N		Z			D	0					1958	N		2425		7-68		
11N/06W-25R01S				Z				5				D		N		2365		7-68		
11N/06W-26E01S	KERR-MCGEE IND	N		Z			D	0					1958	N		2460		7-68		
11N/06W-28D01S				U						6						2495		7-68		
11N/06W-28G01S	STAUFFER CHEM	N		Z				0					1961			2590		7-68		
11N/06W-28L01S	STAUFFER CHEM	N		Z				0					1961	N		2775		7-68		
11N/06W-30A01S	KERN CO LAND CO	N		Z									1957			2490		7-68		
11N/06W-30A02S		F	U	T			D			12			1957			2498		7-68		
11N/06W-30C01S	KERN CO LAND CO	N		Z				0					1957			2510		7-68		
11N/06W-30G01S	KERN CO LAND CO	N		Z									1957			2485		7-68		
11N/06W-30G02S	KERN CO LAND CO	N		Z				0					1957	N		2480		7-68		
11N/06W-30J01S	KERN CO LAND CO	N		Z				0					1957	N		2475		7-68		
11N/06W-30J02S	KERN CO LAND CO	N		Z									1957	N		2475		7-68		
11N/06W-30J03S	KERN CO LAND CO	N		Z				0					1957			2475		7-68		
11N/06W-30K01S	KERN CO LAND CO	N		Z				0					1957			2475		7-68		
11N/06W-30K02S	KERN CO LAND CO	N		Z				0					1957			2475		7-68		
11N/06W-30K03S	KERN CO LAND CO	N		Z				0					1957			2475		7-68		
11N/06W-30L01S	STAUFFER CHEM	N	U	U				1256		12			1964			2485		7-68		
11N/06W-30N01S	STAUFFER CHEM	N	U	U				1074		16			1964			2480		7-68		
11N/06W-30P01S	KERN CO LAND CO	N		Z				0					1957			2480		7-68		
11N/06W-30Q01S	KERN CO LAND CO	N		Z				0					1957			2470		7-68		
11N/06W-30R01S	KERN CO LAND CO	N		Z				0					1957	N		2470		7-68		
11N/06W-30R02S	KERN CO LAND CO	N		Z				0					1957			2465		7-68		
11N/06W-30R03S		F		Z			D	0					1957			2462		7-68		
11N/07W-13D01S	R.C.PHILLIPS	P		Z				0		4			1949	N		2620		7-68		
11N/07W-13K01S	SUN RAY OIL CO	N		Z				0					1959			2570		7-68		
11N/07W-13K02S	SUN RAY OIL CO	N		Z				0								2570		7-68		
11N/07W-13K03S	SUN RAY OIL CO	N		Z				0					1959	N		2575		7-68		
11N/07W-13K04S	SUN RAY OIL CO	N		Z				0					1959	N		2570		7-68		
11N/07W-13L01S	SUN RAY OIL CO	N		Z				0					1959			2575		7-68		

State well number	Owner or user	Ownership	Use of water	Use of well	Well data	Chemical analyses	Log data	Depth of well (feet below lsd)	Depth cased (feet below lsd)	Diameter (inches)	Well finish	Method drilled	Year drilled	Lift type	Power	Altitude of lsd (feet)	Water level (feet below lsd)	Date measured	Yield of well: Gallons per minute	Yield of well: Drawdown (feet)
11N/07W-13L02S	SUN RAY OIL CO	N		Z				0					1959	N		2580		7-68		
11N/07W-13L03S	SUN RAY OIL CO	N		Z				0					1959	N		2590		7-68		
11N/07W-13M01S	SUN RAY OIL CO	N		Z				0						N		2595		7-68		
11N/07W-13R01S	R.C.PHILLIPS	P	U	U				307		8			1949	N		2560	283	7-68		
11N/07W-14L01S				Z				12		10						2650		7-68		
11N/07W-16M01S			U	U				224		14				N		2640	223	8-68		
11N/07W-22D01S	PRUETT	P	U	U				317		8				N		2640	316	7-68		
11N/07W-22N01S				Z				0		12						2560		7-68		
11N/07W-23C01S	STAUFFER CHEM	N	U	U				1935		16			1964	N		2600		7-68		
11N/07W-23C02S	STAUFFER CHEM	N	U	U						12			1964	N		2600		7-68		
11N/07W-24B01S	STAUFFER CHEM	N	U	U				1446		12			1964	N		2550		7-68		
11N/07W-24G01S	R.C.PHILLIPS	P		Z				253		12			1949	N		2545	DRY	7-68		
11N/07W-25G01S	STAUFFER CHEM	N	U	U				1343		16			1964	N		2510		7-68		
11N/07W-26R01S	KERN CO LAND CO	N		Z				0					1958			2505		7-68		
11N/07W-26Z01S				Z				0						N		2518		7-68		
12N/01W-33K01S		P		Z				203		10		H	1960	N		3730	DRY	8-68		
12N/01W-33N01S	HOWARD MCMANNIS	P	H	W				465		6	F		1962	P	S	3760		8-68		
12N/01W-33R01S	HELEN BEELER	P	H	W				365		6						3740		8-68		
12N/04W-34C01S		N		Z				0					1952	N		2150		7-68		
12N/04W-35J01S		P		Z				52		48	C	D		N		2160	DRY	7-68		
12N/02E-07M01S	ROWLAND LYTTLE	P	U	U				8					1953	N		2400	DRY	8-69		
14N/01E-34L01S		P		Z				32		36				N		3520	DRY	8-69		

Table 2.--*Records of water level*

Letter(s) following water-level measurements:

A Well being pumped.
B Well pumped recently.
C Nearby well being pumped.
D Nearby well pumped recently.
E Estimated.
F Dry.
G Measurement by outside agency or person.
H Tape measurement (recorder).
I Affected by outside influence (wind, atmospheric pressure, ocean tides, railroad trains).
J Water level below sea level.
K Measurement from recorder chart.
M Obstruction in well above water surface.
N No measurement.
O Measurement discontinued.
P Well destroyed.
Q Flowing.

28S/45E-26Z1 M. DEPTH 180 FT IN 1952. ALTITUDE ABOUT 2,730 FT.
RECORDS AVAILABLE: 1952.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1952	F						

30S/41E-13H1 M. DEPTH 171.0 FT IN 1968. ALTITUDE ABOUT 2,650 FT.
HIGHEST WATER LEVEL 140.00 FT BELOW LSD, , 1917.
LOWEST STATIC WATER LEVEL 149.04 FT BELOW LSD, JULY 31, 1968.
RECORDS AVAILABLE: 1917, 1954, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1917	140	DEC. 2, 1954	148.25	JULY 31, 1968	149.04		

30S/41E-13Q1 M. DEPTH 428.8 FT IN 1955 AND 423.5 FT IN 1968. ALTITUDE ABOUT 2,710 FT.
HIGHEST WATER LEVEL 186.94 FT BELOW LSD, MAY 8, 1955.
LOWEST STATIC WATER LEVEL 192.22 FT BELOW LSD, JULY 31, 1968.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 8, 1955	186.94	JULY 31, 1968	192.22				

30S/41E-22J2 M. DEPTH 598 FT IN 1968. ALTITUDE ABOUT 2,925 FT.
HIGHEST WATER LEVEL 264.50 FT BELOW LSD, AUG. 29, 1969.
LOWEST STATIC WATER LEVEL 264.50 FT BELOW LSD, AUG. 29, 1969.
RECORDS AVAILABLE: 1969.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG. 29, 1969	264.50						

30S/41E-27M1 M. DEPTH 267.1 FT IN 1968. ALTITUDE ABOUT 2,940 FT.
HIGHEST WATER LEVEL 255.67 FT BELOW LSD, AUG. 28, 1969.
LOWEST STATIC WATER LEVEL 255.88 FT BELOW LSD, AUG. 20, 1968.
RECORDS AVAILABLE: 1968-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG. 20, 1968	255.88	AUG. 28, 1969	255.67				

30S/41E-36G1 M. DEPTH 319.2 FT IN 1953. ALTITUDE ABOUT 2,747 FT.
HIGHEST WATER LEVEL 235.30 FT BELOW LSD, FEB. 17, 1953.
LOWEST STATIC WATER LEVEL 236.77 FT BELOW LSD, JULY 30, 1968.
RECORDS AVAILABLE: 1953-54, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB. 17, 1953	235.3	DEC. 3, 1954	236.10	JULY 30, 1968	236.77		

30S/42E-4E1 M. DEPTH 225 FT IN 1917, 208.9 FT IN 1954, AND 202.9 FT IN 1968. ALTITUDE ABOUT 2,615 FT.
HIGHEST WATER LEVEL 106.20 FT BELOW LSD, OCT. 5, 1917.
LOWEST STATIC WATER LEVEL 107.32 FT BELOW LSD, JUNE 29, 1954, JUNE 29, 1959.
RECORDS AVAILABLE: 1917, 1954-55, 1957, 1959, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 5, 1917	106.2	MAR. 5, 1955	107.09	JUNE 29, 1959	107.32	AUG. 1, 1968	107.31
JUNE 29, 1954	107.32						

30S/42E-5K1 M. DEPTH 174.6 FT IN 1953 AND 170.0 FT IN 1968. ALTITUDE ABOUT 2,630 FT.
HIGHEST WATER LEVEL 121.04 FT BELOW LSD, FEB. 11, 1954.
LOWEST STATIC WATER LEVEL 122.72 FT BELOW LSD, AUG. 1, 1968.
RECORDS AVAILABLE: 1953-54, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 29, 1953	122.38	FEB. 11, 1954	121.04	DEC. 3, 1954	122.50	AUG. 1, 1968	122.72

30S/42E-5L1 M. DEPTH 124.0 FT IN 1955 AND 112.0 FT IN 1968. ALTITUDE ABOUT 2,635 FT.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 7, 1955	F	AUG. 1, 1968	F				

30S/42E-5P1 M. DEPTH 125.4 FT IN 1953 AND 3.0 FT IN 1968. ALTITUDE ABOUT 2,650 FT.
NO ALTITUDE OF LAND SURFACE AVAILABLE FOR THIS WELL
HIGHEST WATER LEVEL 123.02 FT BELOW LSD, APR. 28, 1953.
LOWEST STATIC WATER LEVEL 123.02 FT BELOW LSD, APR. 28, 1953.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 28, 1953	123.02	AUG. 1, 1968	P				

30S/42E-7M1 M. DEPTH 162 FT IN 1917 AND 154.0 FT IN 1968. ALTITUDE ABOUT 2,620 FT.
HIGHEST WATER LEVEL 159.00 FT BELOW LSD, , 1917.
LOWEST STATIC WATER LEVEL 159.00 FT BELOW LSD, , 1917.
RECORDS AVAILABLE: 1917, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1917	159	AUG. 1, 1968	F				

30S/42E-8M1 M. DEPTH 120 FT IN 1953 AND 106 FT IN 1968. ALTITUDE ABOUT 2,627 FT.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 29, 1953	F	AUG. 1, 1968	F				

30S/42E-10L1 M. DEPTH 236.5 FT IN 1953. ALTITUDE ABOUT 2,580 FT.
HIGHEST WATER LEVEL 70.54 FT BELOW LSD, APR. 29, 1954.
LOWEST STATIC WATER LEVEL 74.90 FT BELOW LSD, JAN. 23, 1957.
RECORDS AVAILABLE: 1953-68.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 29, 1954	70.54	JAN. 23, 1957	74.9	NOV. 14, 1960	74.96A	OCT. 12, 1964	71.10
FEB. 11	70.6	MAR. 5	70.70	MAR. 6, 1961	73.43A	MAR. 8, 1965	71.20
DEC. 3	70.64	NOV. 6	70.81	OCT. 24	71.12	OCT. 19	71.09
MAR. 5, 1955	70.65	MAR. 10, 1958	70.79	MAR. 12, 1962	71.18	MAR. 14, 1966	71.08
MAY 7	70.64	NOV. 5	71.55	OCT. 31	71.16	OCT. 17	71.13
NOV. 16	70.63	MAR. 10, 1959	79.32A	MAR. 11, 1963	71.12	MAR. 13, 1967	70.81
MAR. 20, 1956	70.69	NOV. 17	74.94A	OCT. 28	71.15	AUG. 1, 1968	71.04
OCT. 30	70.80	MAR. 1, 1960	74.75A	MAR. 6, 1964	71.12	NOV. 12	71.03

30S/42E-12F1 M. ALTITUDE ABOUT 2,695 FT.
HIGHEST WATER LEVEL 181.00 FT BELOW LSD, JAN. 23, 1957.
LOWEST STATIC WATER LEVEL 193.80 FT BELOW LSD, FEB. 11, 1954.
RECORDS AVAILABLE: 1953-54, 1957, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 29, 1953	182.3	FEB. 11, 1954	193.8	JAN. 23, 1957	181.0	AUG. 1, 1968	184.03

30S/42E-17D1 M. DEPTH 90.6 FT IN 1917, 87 FT IN 1955, AND 85 FT IN 1968. ALTITUDE ABOUT 2,600 FT.
HIGHEST WATER LEVEL 89.30 FT BELOW LSD, OCT. 6, 1917.
LOWEST STATIC WATER LEVEL 89.30 FT BELOW LSD, OCT. 6, 1917.
RECORDS AVAILABLE: 1917, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 6, 1917	89.3	MAR. 5, 1955	F	JULY 31, 1968	F		

30S/42E-17N1 M. DEPTH REPORTED 300 FT. ALTITUDE ABOUT 2,600 FT.
HIGHEST WATER LEVEL 98.00 FT BELOW LSD, DEC. 3, 1954.
LOWEST STATIC WATER LEVEL 98.00 FT BELOW LSD, DEC. 3, 1954.
RECORDS AVAILABLE: 1954.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC. 3, 1954	98						

30S/42E-18Q1 M. ALTITUDE ABOUT 2,650 FT.
HIGHEST WATER LEVEL 105.00 FT BELOW LSD, APR. 29, 1953.
LOWEST STATIC WATER LEVEL 105.00 FT BELOW LSD, APR. 29, 1953.
RECORDS AVAILABLE: 1953.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 29, 1953	105						

30S/42E-18R1 M. DEPTH 160 FT IN 1917. ALTITUDE ABOUT 2,635 FT.
HIGHEST WATER LEVEL 98.62 FT BELOW LSD, JULY 31, 1968.
LOWEST STATIC WATER LEVEL 103.70 FT BELOW LSD, NOV. 12, 1968.
RECORDS AVAILABLE: 1917, 1953-68.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1917	100	MAR. 10, 1958	100.74	OCT. 24, 1961	100.24	MAR. 8, 1965	99.02
APR. 19, 1953	99.43	NOV. 4	100.42	MAR. 12, 1962	100.36	OCT. 19	99.09
DEC. 3, 1954	101.20	MAR. 10, 1959	100.41	OCT. 31	99.52	MAR. 14, 1966	98.71
MAR. 5, 1955	101.73C	NOV. 17	100.22	MAR. 11, 1963	99.42	OCT. 17	98.99
MAY 8	106.98C	MAR. 1, 1960	100.01	OCT. 28	99.30	MAR. 13, 1967	98.84
NOV. 16	100.87	NOV. 14	99.85	MAR. 6, 1964	99.18	JULY 31, 1968	98.62
MAR. 20, 1956	102.38	MAR. 6, 1961	99.89	OCT. 12	99.07	NOV. 12	103.70
NOV. 6, 1957	100.94						

30S/42E-19A1 M. DEPTH REPORTED 300 FT. ALTITUDE ABOUT 2,610 FT.
HIGHEST WATER LEVEL 108.00 FT BELOW LSD, DEC. 3, 1954.
LOWEST STATIC WATER LEVEL 108.00 FT BELOW LSD, DEC. 3, 1954.
RECORDS AVAILABLE: 1954.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC. 3, 1954	108						

30S/42E-20D1 M. ALTITUDE ABOUT 2,600 FT.
HIGHEST WATER LEVEL 89.74 FT BELOW LSD, JULY 31, 1968.
LOWEST STATIC WATER LEVEL 93.20 FT BELOW LSD, OCT. 30, 1956.
RECORDS AVAILABLE: 1953, 1955-68.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 29, 1953	91.25	MAR. 10, 1958	92.00	OCT. 24, 1961	91.68	MAR. 8, 1965	90.28
MAR. 5, 1955	99.74C	NOV. 4	91.78	MAR. 12, 1962	91.05	OCT. 19	90.16
MAY 8	98.89C	MAR. 10, 1959	91.58	OCT. 31	90.83	MAR. 14, 1966	90.04
NOV. 16	92.39	NOV. 17	91.47	MAR. 11, 1963	90.72	OCT. 17	90.04
MAR. 20, 1956	92.58	MAR. 1, 1960	91.23	OCT. 28	90.54	MAR. 13, 1967	90.54
OCT. 30	93.20	NOV. 14	91.22	MAR. 6, 1964	90.42	JULY 31, 1968	89.74
MAR. 5, 1957	93.10	MAR. 6, 1961	91.02	OCT. 12	90.36	NOV. 12	93.18
NOV. 6	92.16						

30S/42E-20K1 M. ALTITUDE ABOUT 2,565 FT.
HIGHEST WATER LEVEL 51.91 FT BELOW LSD, JULY 30, 1968.
LOWEST STATIC WATER LEVEL 51.91 FT BELOW LSD, JULY 30, 1968.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 29, 1953	97.51A	JULY 30, 1968	51.91				

30S/42E-21N1 M. DEPTH 116.5 FT IN 1917 AND 189.5 FT IN 1955. ALTITUDE ABOUT 2,560 FT.
HIGHEST WATER LEVEL 45.90 FT BELOW LSD, OCT. 6, 1917.
LOWEST STATIC WATER LEVEL 50.07 FT BELOW LSD, JUNE 16, 1955.
RECORDS AVAILABLE: 1917, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 6, 1917	45.9	JUNE 16, 1955	50.07	JULY 30, 1968	P		

30S/42E-22A1 M. DEPTH 59.6 FT IN 1917, 39 FT IN 1955, AND 29.0 FT IN 1968. ALTITUDE ABOUT 2,554 FT.
HIGHEST WATER LEVEL 49.50 FT BELOW LSD, OCT. 6, 1917.
LOWEST STATIC WATER LEVEL 49.50 FT BELOW LSD, OCT. 6, 1917.
RECORDS AVAILABLE: 1917, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 6, 1917	49.5	MAR. 5, 1955	F	AUG. 13, 1968	F		

30S/42E-24L1 M. ALTITUDE ABOUT 2,656 FT.
HIGHEST WATER LEVEL 147.04 FT BELOW LSD, NOV. 16, 1955.
LOWEST STATIC WATER LEVEL 153.49 FT BELOW LSD, MAR. 12, 1962.
RECORDS AVAILABLE: 1953-68.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG. 19, 1953	147.1	NOV. 6, 1957	147.30	MAR. 6, 1961	147.79	MAR. 8, 1965	147.63
DEC. 3, 1954	147.1	MAR. 10, 1958	147.50	OCT. 24	147.33	OCT. 19	150.24A
MAR. 5, 1955	147.18	NOV. 5	147.31	MAR. 12, 1962	153.49	MAR. 14, 1966	149.00A
MAY 9	147.18	MAR. 10, 1959	147.56	OCT. 31	147.94	OCT. 17	147.84A
NOV. 16	147.04	NOV. 17	152.16A	OCT. 28, 1963	147.38	MAR. 13, 1967	149.51A
MAR. 20, 1956	147.20	MAR. 1, 1960	147.50	MAR. 6, 1964	150.84A	AUG. 1, 1968	149.5
OCT. 30	147.77	NOV. 14	147.74	OCT. 12	148.92A	NOV. 12	150.43A
MAR. 5, 1957	147.10						

30S/43E-2D1 M. DEPTH 15 FT IN 1909, 32.6 FT IN 1917. REDRILLED TO UNKNOWN DEPTH BEFORE 1953. ALTITUDE ABOUT 3,520 FT.
HIGHEST WATER LEVEL 12.00 FT BELOW LSD, , 1909.
LOWEST STATIC WATER LEVEL 20.90 FT BELOW LSD, JAN. 24, 1920.
RECORDS AVAILABLE: 1909, 1917, 1920, 1953, 1955.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1909	12	JAN. 24, 1920	20.9	AUG. 19, 1953	17.75	MAR. 5, 1955	19.55
OCT. 5, 1917	31.6 B						

30S/43E-32N1 M. DEPTH 429 FT IN 1957. ALTITUDE ABOUT 2,840 FT.
HIGHEST WATER LEVEL 326.69 FT BELOW LSD, AUG. 6, 1968.
LOWEST STATIC WATER LEVEL 327.00 FT BELOW LSD, FEB. 24, 1957.
RECORDS AVAILABLE: 1957, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB. 24, 1957	327	AUG. 6, 1968	326.69				

30S/44E-28I M. DEPTH 33 FT IN 1955 AND 53.4 FT IN 19689 ALTITUDE ABOUT 4,160 FT.
HIGHEST WATER LEVEL 29.56 FT BELOW LSD, MAY 8, 1955.
LOWEST STATIC WATER LEVEL 51.40 FT BELOW LSD, AUG. 7, 1968.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 8, 1955	29.56	AUG. 7, 1968	51.4				

30S/44E-35E1 M. DEPTH 146.0 FT IN 1968. ALTITUDE ABOUT 3,451 FT.
HIGHEST WATER LEVEL 86.08 FT BELOW LSD, MAY 8, 1955.
LOWEST STATIC WATER LEVEL 86.08 FT BELOW LSD, MAY 8, 1955.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 8, 1955	86.08	AUG. 8, 1968	86.42A				

30S/45E-5E1 M. DEPTH 13 FT IN 1917.
HIGHEST WATER LEVEL 5.00 FT BELOW LSD, JAN. 24, 1920.
LOWEST STATIC WATER LEVEL 8.00 FT BELOW LSD, SEP. 22, 1917.
RECORDS AVAILABLE: 1917, 1920, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP. 22, 1917	8	JAN. 24, 1920	5	AUG. 8, 1968	Q		

30S/45E-9H1 M. ALTITUDE ABOUT 3,420 FT.
HIGHEST WATER LEVEL 152.60 FT BELOW LSD, MAR. 5, 1955.
LOWEST STATIC WATER LEVEL 155.07 FT BELOW LSD, AUG. 8, 1968.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR. 5, 1955	152.6	AUG. 8, 1968	155.07				

30S/45E-14A1 M. DEPTH 105 FT IN 1916 AND 83.0 FT IN 1968. ALTITUDE ABOUT 3,200 FT.
RECORDS AVAILABLE: 1916, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG. 1916	F	AUG. 14, 1968	F				

30S/45E-24P1 M. DEPTH 85 FT IN 1916 AND 3.0 FT IN 1968. ALTITUDE ABOUT 3,100 FT.
RECORDS AVAILABLE: 1916, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP. 1916	F	AUG. 14, 1968	P				

30S/45E-26Q1 M. DEPTH 209 FT IN 1917, 165.5 FT IN 1955, AND 153.0 FT IN 1968. ALTITUDE ABOUT 3,095 FT.
HIGHEST WATER LEVEL 175.00 FT BELOW LSD, MAY , 1917.
LOWEST STATIC WATER LEVEL 175.00 FT BELOW LSD, MAY , 1917.
RECORDS AVAILABLE: 1917, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 1917	175	MAR. 5, 1955	F	AUG. 15, 1968	F		

30S/45E-35P1 M. DEPTH 148 FT TO OBSTRUCTION IN 1968. ALTITUDE ABOUT 3,062 FT.
HIGHEST WATER LEVEL 142.62 FT BELOW LSD, DEC. 1, 1954.
LOWEST STATIC WATER LEVEL 145.00 FT BELOW LSD, FEB. 10, 1954.
RECORDS AVAILABLE: 1954, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB. 10, 1954	145.0	DEC. 1, 1954	142.62	AUG. 15, 1968	F		

30S/46E-19M1 M. DEPTH 99 FT IN 1916 AND 4.0 FT IN 1968. ALTITUDE ABOUT 3,110 FT.
RECORDS AVAILABLE: 1916, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 1916	F	AUG. 14, 1968	P				

31S/41E-31N1 M. DEPTH 340 FT IN 1943 AND 0 FT IN 1968. ALTITUDE ABOUT 2,775 FT.
HIGHEST WATER LEVEL 219.80 FT BELOW LSD, OCT. 15, 1952.
LOWEST STATIC WATER LEVEL 219.80 FT BELOW LSD, OCT. 15, 1952.
RECORDS AVAILABLE: 1952, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 15, 1952	219.80	JULY 30, 1968	P				

31S/42E-5R1 M. DEPTH 52.2 FT IN 1957, 57 FT IN 1960, AND 53.7 FT IN 1968. ALTITUDE ABOUT 2,555 FT.
HIGHEST WATER LEVEL 51.47 FT BELOW LSD, MAR. 4, 1955, MAY 8, 1955.
LOWEST STATIC WATER LEVEL 57.90 FT BELOW LSD, NOV. 17, 1959.
RECORDS AVAILABLE: 1953, 1955-61, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG. 19, 1953	51.82	MAR. 20, 1956	51.60	MAR. 10, 1958	51.82	MAR. 6, 1961	F
MAR. 4, 1955	51.47	OCT. 30	53.43A	MAR. 10, 1959	52	OCT. 24	F
MAY 8	51.47	MAR. 5, 1957	52.70	NOV. 17	57.90	JULY 30, 1968	52.20
NOV. 16	51.53						

31S/42E-23L1 M. DEPTH 108.0 FT IN 1968. ALTITUDE ABOUT 2,685 FT.
HIGHEST WATER LEVEL 172.52 FT BELOW LSD, MAR. 4, 1955.
LOWEST STATIC WATER LEVEL 185.00 FT BELOW LSD, MAY 7, 1956.
RECORDS AVAILABLE: 1953, 1955-56, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG. 18, 1953	174.9	MAR. 4, 1955	172.52	MAY 7, 1956	185	SEP. 23, 1968	F
FEB. 11, 1954	173.7						

31S/43E-30M2 M. DEPTH 218.0 FT IN 1954 AND 5.0 FT IN 1968. ALTITUDE ABOUT 2,705 FT.
HIGHEST WATER LEVEL 189.20 FT BELOW LSD, FEB. 11, 1954.
LOWEST STATIC WATER LEVEL 189.35 FT BELOW LSD, MAR. 4, 1955.
RECORDS AVAILABLE: 1954-55, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB. 11, 1954	189.2	MAR. 4, 1955	189.35	JULY 23, 1968	P		

31S/45E-1C1 M. DEPTH 230 FT IN 1920, 150.0 FT IN 1954, AND 142.0 FT IN 1968. ALTITUDE ABOUT 3,040 FT.
HIGHEST WATER LEVEL 116.00 FT BELOW LSD, JAN. 24, 1920.
LOWEST STATIC WATER LEVEL 121.20 FT BELOW LSD, FEB. 10, 1954.
RECORDS AVAILABLE: 1920, 1954-68.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 24, 1920	116	NOV. 7, 1957	117.59	MAR. 6, 1961	117.59	OCT. 12, 1964	117.56
FEB. 10, 1954	121.20	MAR. 10, 1958	117.48	OCT. 24	117.50	MAR. 8, 1965	117.64
DEC. 1	117.62	NOV. 5	117.54	MAR. 12, 1962	117.58	OCT. 19	117.57
MAR. 6, 1955	117.61	MAR. 10, 1959	117.54	OCT. 31	117.49	MAR. 14, 1966	117.56
NOV. 17	117.44	NOV. 17	117.49	MAR. 11, 1963	117.47	OCT. 17	117.65
MAR. 21, 1956	117.53	MAR. 1, 1960	117.49	OCT. 28	117.46	MAR. 13, 1967	117.60
OCT. 30	117.46	NOV. 14	117.48	MAR. 10, 1964	117.42	AUG. 15, 1968	117.61
MAR. 6, 1957	117.60						

31S/45E-1Z1 M. DEPTH 250 FT IN 1917 AND 0 FT IN 1968. ALTITUDE ABOUT 3,040 FT.
HIGHEST WATER LEVEL 125.00 FT BELOW LSD, FEB. , 1917.
LOWEST STATIC WATER LEVEL 125.00 FT BELOW LSD, FEB. , 1917.
RECORDS AVAILABLE: 1917, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB. 1917	125	MAR. 6, 1955	P	AUG. 15, 1968	P		

31S/45E-12A1 M. DEPTH 201 FT IN 1916, 85.0 FT IN 1955, AND 84.0 FT IN 1968. ALTITUDE ABOUT 3,017 FT.
HIGHEST WATER LEVEL 95.60 FT BELOW LSD, NOV. , 1916.
LOWEST STATIC WATER LEVEL 95.60 FT BELOW LSD, NOV. , 1916.
RECORDS AVAILABLE: 1916, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV. 1916	95.6	MAR. 6, 1955	F	AUG. 22, 1968	F		

31S/45E-14L1 M. DEPTH 105 FT WHEN DRILLED AND 80.0 FT IN 1968. ALTITUDE ABOUT 3,015 FT.
RECORDS AVAILABLE: 1922, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 1922	F	AUG. 21, 1968	F				

31S/45E-15J1 M. DEPTH 220 FT IN 1917, 207.5 FT IN 1954, AND 116.0 FT IN 1968. ALTITUDE ABOUT 3,034 FT.
HIGHEST WATER LEVEL 107.81 FT BELOW LSD, DEC. 1, 1954.
LOWEST STATIC WATER LEVEL 117.00 FT BELOW LSD, AUG. , 1917.
RECORDS AVAILABLE: 1917, 1953-54, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG. 1917	117	AUG. 25, 1953	109.6	DEC. 1, 1954	107.81	AUG. 21, 1968	107.86

31S/45E-24Q1 M. DEPTH 106.0 FT IN 1968. ALTITUDE ABOUT 3,026 FT.
HIGHEST WATER LEVEL 105.79 FT BELOW LSD, OCT. 19, 1965.
LOWEST STATIC WATER LEVEL 107.79 FT BELOW LSD, OCT. 28, 1963.
RECORDS AVAILABLE: 1953-54, 1958-68.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG. 25, 1953	106.63	MAR. 1, 1960	105.86	NOV. 1, 1962	106.04	OCT. 19, 1965	105.79
FEB. 10, 1954	106.8	NOV. 14	105.88	MAR. 11, 1963	105.8 A	MAR. 14, 1966	105.95
DEC. 1	105.93	MAR. 6, 1961	106.48	OCT. 28	107.79	OCT. 17	106.00
NOV. 5, 1958	105.94	JULY 26	107.2	MAR. 6, 1964	105.88	MAR. 13, 1967	106.48
MAR. 10, 1959	105.90	OCT. 25	105.93	OCT. 12	106.01	AUG. 21, 1968	F
NOV. 17	105.92	MAR. 12, 1962	106.60	MAR. 8, 1965	106.00		

31S/45E-24Z1 M. DEPTH 208 FT IN 1917 AND 0 FT IN 1968. ALTITUDE ABOUT 3,020 FT.
HIGHEST WATER LEVEL 122.00 FT BELOW LSD, MAR. , 1917.
LOWEST STATIC WATER LEVEL 122.00 FT BELOW LSD, MAR. , 1917.
RECORDS AVAILABLE: 1917, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR. 1917	122	MAR. 6, 1955	P	AUG. 21, 1968	P		

31S/46E-2M1 M. DEPTH 225 FT IN 1915, 116.0 FT IN 1954, AND 101.0 FT IN 1968. ALTITUDE ABOUT 3,020 FT.
HIGHEST WATER LEVEL 99.01 FT BELOW LSD, MAR. 1, 1960.
LOWEST STATIC WATER LEVEL 124.00 FT BELOW LSD, APR. 1, 1922.
RECORDS AVAILABLE: 1915, 1922, 1954-68.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JULY 1915	104	MAR. 16, 1957	99.68	MAR. 6, 1961	100.16	OCT. 12, 1964	101.32
APR. 1, 1922	124	NOV. 7	99.77	OCT. 24	100.15	MAR. 8, 1965	99.86
FEB. 10, 1954	101.7	MAR. 10, 1958	99.63	MAR. 12, 1962	105.53	OCT. 19	99.79
DEC. 1	99.75	NOV. 5	101.78	NOV. 1	104.38	MAR. 14, 1966	99.69
MAR. 6, 1955	99.82	MAR. 10, 1959	99.75	MAR. 11, 1963	104.11	OCT. 17	100.41
NOV. 17	99.65	NOV. 17	99.75	OCT. 28	103.45	MAR. 13, 1967	102.43
MAR. 21, 1956	99.74	MAR. 1, 1960	99.01	MAR. 6, 1964	101.99	AUG. 22, 1968	100.39
OCT. 30	99.75	NOV. 14	99.60				

31S/46E-5Z1 M. DEPTH 306 FT IN 1917 AND 0 FT IN 1955 AND 1968. ALTITUDE ABOUT 3,040 FT.
HIGHEST WATER LEVEL 105.00 FT BELOW LSD, , 1917.
LOWEST STATIC WATER LEVEL 105.00 FT BELOW LSD, , 1917.
RECORDS AVAILABLE: 1917, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1917	105	1955	P	AUG. 22, 1968	P		

31S/46E-6J1 M. DEPTH 300 FT IN 1922, 281.0 FT IN 1954, AND 276.0 FT IN 1968. ALTITUOE ABOUT 3,035 FT.
HIGHEST WATER LEVEL 109.13 FT BELOW LSD, DEC. 1, 1954.
LOWEST STATIC WATER LEVEL 117.00 FT BELOW LSD, APR. , 1922.
RECORDS AVAILABLE: 1922, 1954-55, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 1922	117	DEC. 1, 1954	109.13	MAR. 6, 1955	109.23	AUG. 22, 1968	109.26

31S/46E-7P1 M. DEPTH 136 FT IN 1917, 135 FT IN 1922, 80.9 FT IN 1955, AND 83.1 FT IN 1968. ALTITUDE ABOUT 3,020 FT.
HIGHEST WATER LEVEL 110.00 FT BELOW LSD, , 1917, APR. , 1922.
LOWEST STATIC WATER LEVEL 110.00 FT BELOW LSD, , 1917, APR. , 1922.
RECORDS AVAILABLE: 1917, 1922, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1917	110	APR. 1922	110	MAR. 6, 1955	F	AUG. 22, 1968	F

31S/46E-12P1 M. DEPTH 115 FT IN 1922, 150.8 FT IN 1954, 11 FT IN 1960 AND 0 FT IN 1968. ALTITUDE ABOUT 3,004 FT.
HIGHEST WATER LEVEL 84.00 FT BELOW LSD, FEB. 10, 1954.
LOWEST STATIC WATER LEVEL 86.00 FT BELOW LSD, APR. 1, 1922.
RECORDS AVAILABLE: 1922, 1954-60, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 1, 1922	86	NOV. 17, 1955	84.71	NOV. 7, 1957	84.78	NOV. 17, 1959	F
FEB. 10, 1954	84.0	MAR. 21, 1956	84.69	MAR. 10, 1958	84.65	MAR. 1, 1960	F
DEC. 1	84.76	OCT. 30	84.78	NOV. 5	84.72	NOV. 14	F
MAR. 6, 1955	84.72	MAR. 6, 1957	84.72	MAR. 10, 1959	84.67	AUG. 22, 1968	P

31S/46E-14K1 M. DEPTH 311 FT IN 1922, 207.5 FT IN 1955, AND 205.0 FT IN 1968. ALTITUDE ABOUT 3,010 FT.
HIGHEST WATER LEVEL 91.00 FT BELOW LSD, APR. 1, 1922.
LOWEST STATIC WATER LEVEL 91.55 FT BELOW LSD, AUG. 22, 1968.
RECORDS AVAILABLE: 1922, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 1, 1922	91	MAR. 6, 1955	91.52	AUG. 22, 1968	91.55		

31S/46E-16J1 M. DEPTH 265 FT IN 1953, 245.5 FT IN 1954, AND 227.5 FT IN 1968. ALTITUDE ABOUT 3,011 FT.
HIGHEST WATER LEVEL 93.00 FT BELOW LSD, DEC. 15, 1953.
LOWEST STATIC WATER LEVEL 94.05 FT BELOW LSD, OCT. 17, 1966.
RECORDS AVAILABLE: 1953-54, 1961-68.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC. 15, 1953	93	MAR. 12, 1962	93.20	MAR. 6, 1964	93.05	MAR. 14, 1966	93.12
FEB. 10, 1954	93.20	NOV. 1	93.15	OCT. 12	93.12	OCT. 17	94.05
DEC. 1	93.20	MAR. 11, 1963	93.12	MAR. 8, 1965	93.14	MAR. 13, 1967	93.43
OCT. 25, 1961	93.09	OCT. 28	93.07	OCT. 19	93.13	AUG. 21, 1968	93.22

31S/46E-16N1 M. DEPTH 358.0 FT IN 1968. ALTITUDE ABOUT 3,005 FT.
HIGHEST WATER LEVEL 88.40 FT BELOW LSD, MAR. 23, 1957.
LOWEST STATIC WATER LEVEL 91.26 FT BELOW LSD, AUG. 21, 1968.
RECORDS AVAILABLE: 1955, 1957, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR. 16, 1955	90.75	MAR. 23, 1957	88.4	AUG. 21, 1968	91.26		

31S/46E-18Z1 M. DEPTH 200 FT IN 1915, 193 FT IN 1922, AND 0 FT IN 1968. ALTITUDE ABOUT 3,025 FT.
HIGHEST WATER LEVEL 113.00 FT BELOW LSD, MAR. , 1915.
LOWEST STATIC WATER LEVEL 115.00 FT BELOW LSD, APR. , 1922.
RECORDS AVAILABLE: 1915, 1922, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR. 1915	113	APR. 1922	115	MAR. 6, 1955	P	AUG. 21, 1968	P

31S/46E-19J1 M. DEPTH 150 FT IN 1917, 125 FT IN 1954, AND 101.0 FT IN 1968. ALTITUDE ABOUT 3,015 FT.
HIGHEST WATER LEVEL 135.00 FT BELOW LSD, , 1917.
LOWEST STATIC WATER LEVEL 135.00 FT BELOW LSD, , 1917.
RECORDS AVAILABLE: 1917, 1954, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1917	135	DEC. 1, 1954	F	AUG. 21, 1968	F		

31S/46E-19M1 M. DEPTH 120 FT IN 1914 AND 118.0 FT IN 1955 AND 1968. ALTITUDE ABOUT 3,020 FT.
HIGHEST WATER LEVEL 104.25 FT BELOW LSD, MAR. 6, 1955.
LOWEST STATIC WATER LEVEL 113.00 FT BELOW LSD, APR. , 1922.
RECORDS AVAILABLE: 1914, 1922, 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 1914	112	APR. 1922	113	MAR. 6, 1955	104.25	AUG. 21, 1968	104.28

31S/46E-19R1 M. DEPTH 192 FT IN 1914 AND 66.0 FT IN 1968. ALTITUDE ABOUT 3,020 FT.
RECORDS AVAILABLE: 1914, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG. 1914	F	AUG. 21, 1968	F				

31S/46E-21A1 M. DEPTH 135 FT IN 1916 AND 0 FT IN 1968. ALTITUDE ABOUT 2,016 FT.
HIGHEST WATER LEVEL 131.00 FT BELOW LSD, APR. , 1922.
LOWEST STATIC WATER LEVEL 131.00 FT BELOW LSD, APR. , 1922.
RECORDS AVAILABLE: 1917, 1922, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1917	F	APR. 1922	131	AUG. 21, 1968	P		

31S/46E-21M1 M. DEPTH 138.4 FT IN 1954, 107.7 FT IN 1957, AND 10.3 FT IN 1968. ALTITUDE ABOUT 3,042 FT.
HIGHEST WATER LEVEL 107.20 FT BELOW LSD, AUG. 25, 1953.
LOWEST STATIC WATER LEVEL 120.30 FT BELOW LSD, MAR. , 1915, APR. , 1922.
RECORDS AVAILABLE: 1915, 1922, 1953-57, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR. 1915	120.3	FEB. 10, 1954	108.2	NOV. 17, 1955	108.09	JAN. 23, 1957	109.3
APR. 1922	120.3	DEC. 1	108.10	MAR. 21, 1956	108.05	NOV. 7	F
AUG. 25, 1953	107.2	MAR. 6, 1955	108.08	OCT. 30	108.07	AUG. 21, 1968	P

31S/47E-5R1 M. DEPTH 278 FT IN 1915 AND 1.5 FT IN 1968. ALTITUDE ABOUT 3,113 FT.
HIGHEST WATER LEVEL 248.50 FT BELOW LSD, FEB. , 1915.
LOWEST STATIC WATER LEVEL 257.50 FT BELOW LSD, FEB. 11, 1952.
RECORDS AVAILABLE: 1915, 1952-54, 1957, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB. 1915	248.5	APR. 1953	257.5 A	FEB. 10, 1954	252.5	JAN. 23, 1957	251.5
FEB. 11, 1952	257.5	FEB. 10, 1954	253.2	DEC. 1	252.99	AUG. 22, 1968	P

32S/41E-15J1 M. DEPTH 305 FT IN 1946. ALTITUDE ABOUT 2,745 FT.
HIGHEST WATER LEVEL 203.02 FT BELOW LSD, JULY 30, 1968.
LOWEST STATIC WATER LEVEL 230.00 FT BELOW LSD, , 1946.
RECORDS AVAILABLE: 1946, 1952, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1946	230	OCT. 15, 1952	203.10	JULY 30, 1968	203.02		

32S/43E-28K1 M. DEPTH 10.5 FT IN 1953 AND 1968. ALTITUDE ABOUT 2,277 FT.
HIGHEST WATER LEVEL 9.50 FT BELOW LSD, JUNE 17, 1953.
LOWEST STATIC WATER LEVEL 10.00 FT BELOW LSD, JULY 24, 1968.
RECORDS AVAILABLE: 1953, 1955-56, 1958-60, 1962, 1964-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 17, 1953	9.5 Q	MAY 4, 1959	Q	DEC. 3, 1964	Q	DEC. 7, 1967	Q
APR. 14, 1955	Q	NOV. 11	Q	MAY 19, 1965	Q	APR. 30, 1968	Q
APR. 12, 1956	Q	MAR. 23, 1960	Q	DEC. 8	Q	JULY 24	10.0 Q
DEC. 21	Q	NOV. 14, 1962	Q	MAY 5, 1966	Q	NOV. 15	Q
FEB. 25, 1958	Q	JAN. 17, 1964	Q	NOV. 17	Q	APR. 9, 1969	Q
DEC. 2	Q	APR. 21	Q	MAR. 31, 1967	Q		

32S/47E-20R1 M. DEPTH 368 FT IN 1938. ALTITUDE ABOUT 3,475 FT.
HIGHEST WATER LEVEL 91.00 FT BELOW LSD, FEB. 12, 1953.
LOWEST STATIC WATER LEVEL 115.43 FT BELOW LSD, AUG. 28, 1968.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB. 12, 1953	91	AUG. 28, 1968	115.43				

32S/47E-21P1 M. DEPTH 88 FT IN 1917, AND 92.0 FT IN 1968. ALTITUDE ABOUT 3,493 FT.
HIGHEST WATER LEVEL 82.50 FT BELOW LSD, OCT. 12, 1917.
LOWEST STATIC WATER LEVEL 85.13 FT BELOW LSD, AUG. 28, 1968.
RECORDS AVAILABLE: 1917, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 12, 1917	82.5	AUG. 28, 1968	85.13				

32S/47E-34D1 M. DEPTH 40.8 FT IN 1917 AND 25.0 FT IN 1968. ALTITUDE ABOUT 3,440 FT.
HIGHEST WATER LEVEL 24.30 FT BELOW LSD, OCT. 12, 1917.
LOWEST STATIC WATER LEVEL 24.30 FT BELOW LSD, OCT. 12, 1917.
RECORDS AVAILABLE: 1917, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 12, 1917	24.3	AUG. 28, 1968	F				

32S/47E-34D2 M. DEPTH 40 FT IN 1917 AND 20.0 FT IN 1968. ALTITUDE ABOUT 3,420 FT.
HIGHEST WATER LEVEL 28.00 FT BELOW LSD, OCT. 12, 1917.
LOWEST STATIC WATER LEVEL 28.00 FT BELOW LSD, OCT. 12, 1917.
RECORDS AVAILABLE: 1917, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 12, 1917	28	AUG. 28, 1968	F				

11N/3W-4C1 S. DEPTH 99.1 FT IN 1955 AND 6.0 FT IN 1968. ALTITUDE ABOUT 2,130 FT.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 11, 1955	F	JULY 3, 1968	P				

11N/3W-7D1 S. DEPTH 121.1 FT IN 1953 AND 125.5 FT IN 1968. ALTITUDE ABOUT 2,065 FT.
HIGHEST WATER LEVEL 55.55 FT BELOW LSD, JUNE 16, 1954.
LOWEST STATIC WATER LEVEL 66.00 FT BELOW LSD, APR. 11, 1969.
RECORDS AVAILABLE: 1953-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG. 26, 1953	62.42	MAR. 25, 1958	58.47	MAR. 15, 1962	61.06	MAR. 16, 1966	63.37
JUNE 16, 1954	55.55	NOV. 6	58.91	MAR. 22	61.00	MAY 4	63.4
NOV. 22	55.90	DEC. 2	59.00	NOV. 2	61.43	OCT. 19	63.73
MAR. 4, 1955	56.09	MAR. 12, 1959	59.21	NOV. 14	61.50	NOV. 17	63.7
APR. 14	57.60	MAY 4	58.73	MAR. 13, 1963	61.59	MAR. 15, 1967	64.55
NOV. 17	56.62	NOV. 11	59.33	MAR. 18	61.7	MAR. 31	64.0
MAR. 23, 1956	56.89	NOV. 18	59.69	OCT. 30	61.93	OCT. 23	64.50
APR. 12	57.27	MAR. 2, 1960	59.90	JAN. 17, 1964	62.1	APR. 11, 1968	64.82
NOV. 2	57.28	MAR. 23	59.48	MAR. 8	62.12	MAY 3	65.0
DEC. 21	57.45	NOV. 16	60.33	APR. 21	62.1	JULY 10	64.88
MAR. 6, 1957	60.30	MAR. 8, 1961	60.52	OCT. 14	62.50	NOV. 14	65.26
MAY 2	57.76	MAY 1	63.80	DEC. 3	62.6	NOV. 21	65.3
NOV. 8	58.15	OCT. 27	60.84	MAR. 10, 1965	62.76	APR. 8, 1969	65.58
DEC. 3	58.22	NOV. 28	60.60	OCT. 18	63.11	APR. 11	66
MAR. 11, 1958	58.45						

11N/3W-7M1 S. DEPTH 50.5 FT IN 1955 AND 0 FT IN 1968. ALTITUDE ABOUT 2,450 FT.
NO ALTITUDE OF LAND SURFACE AVAILABLE FOR THIS WELL
HIGHEST WATER LEVEL 27.74 FT BELOW LSD, MAY 10, 1955.
LOWEST STATIC WATER LEVEL 27.74 FT BELOW LSD, MAY 10, 1955.
RECORDS AVAILABLE: 1955.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 10, 1955	27.74	JULY 10, 1968	P				

11N/3W-7Z1 S. DEPTH 100 FT IN 1919 AND 0 FT IN 1968. ALTITUDE ABOUT 2,060 FT.
HIGHEST WATER LEVEL 40.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 40.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	40	JULY 11, 1968	P				

11N/3W-7Z2 S. DEPTH 0 FT IN 1968. ALTITUDE ABOUT 2,045 FT.
HIGHEST WATER LEVEL 15.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 15.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	15	JULY 11, 1968	P				

11N/3W-7Z3 S. DEPTH 0 FT IN 1968. ALTITUDE ABOUT 2,040 FT.
HIGHEST WATER LEVEL 19.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 19.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	19	JULY 11, 1968	P				

11N/3W-8G1 S. DEPTH 115 FT IN 1955 AND 110.0 FT IN 1968. ALTITUDE ABOUT 2,075 FT.
HIGHEST WATER LEVEL 47.92 FT BELOW LSD, MAY 11, 1955.
LOWEST STATIC WATER LEVEL 51.88 FT BELOW LSD, JULY 10, 1968.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 11, 1955	47.92	JULY 10, 1968	51.88				

11N/3W-15E1 S. DEPTH 150 FT IN 1954. ALTITUDE ABOUT 2,140 FT.
HIGHEST WATER LEVEL 108.00 FT BELOW LSD, MAY 11, 1955.
LOWEST STATIC WATER LEVEL 108.00 FT BELOW LSD, MAY 11, 1955.
RECORDS AVAILABLE: 1955.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 11, 1955	108						

11N/3W-15F1 S. DEPTH 228 FT IN 1957. ALTITUDE ABOUT 2,170 FT.
HIGHEST WATER LEVEL 120.00 FT BELOW LSD, , 1957.
LOWEST STATIC WATER LEVEL 120.00 FT BELOW LSD, , 1957.
RECORDS AVAILABLE: 1957.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1957	120						

11N/3W-16Z1 S. ALTITUDE ABOUT 2,125 FT.
HIGHEST WATER LEVEL 110.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 110.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	110	JULY 3, 1968	P				

11N/3W-19B1 S. DEPTH 95 FT IN 1955 AND 80.2 FT IN 1969. ALTITUDE ABOUT 2,030 FT.
HIGHEST WATER LEVEL 4.51 FT BELOW LSD, MAY 11, 1955.
LOWEST STATIC WATER LEVEL 7.26 FT BELOW LSD, AUG. 19, 1969.
RECORDS AVAILABLE: 1955, 1969.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 11, 1955	4.51	AUG. 19, 1969	7.26				

11N/3W-20N1 S. DEPTH 11 FT IN 1919 AND 0 FT IN 1968. ALTITUDE ABOUT 2,040 FT.
HIGHEST WATER LEVEL 11.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 11.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	11	JULY 18, 1968	P				

11N/3W-20P1 S. DEPTH 189.2 FT IN 1955 AND 187.0 FT IN 1968. ALTITUDE ABOUT 2,050 FT.
HIGHEST WATER LEVEL 16.16 FT BELOW LSD, MAY 11, 1955.
LOWEST STATIC WATER LEVEL 22.02 FT BELOW LSD, JULY 3, 1968.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 11, 1955	16.16	JULY 3, 1968	22.02				

11N/3W-21L1 S. DEPTH 116 FT IN 1966. ALTITUDE ABOUT 2,065 FT.
HIGHEST WATER LEVEL 39.50 FT BELOW LSD, , 1966.
LOWEST STATIC WATER LEVEL 39.50 FT BELOW LSD, , 1966.
RECORDS AVAILABLE: 1966.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1966	39.5						

11N/3W-21L1 S. DEPTH 85 FT IN 1962. ALTITUDE ABOUT 2,065 FT.
HIGHEST WATER LEVEL 42.50 FT BELOW LSD, , 1962.
LOWEST STATIC WATER LEVEL 42.50 FT BELOW LSD, , 1962.
RECORDS AVAILABLE: 1962.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1962	42.5						

11N/3W-21R1 S. DEPTH 184 FT IN 1955 AND 194.5 FT IN 1968. ALTITUDE ABOUT 2,080 FT.
HIGHEST WATER LEVEL 55.15 FT BELOW LSD, MAY 5, 1954.
LOWEST STATIC WATER LEVEL 60.62 FT BELOW LSD, JULY 5, 1968.
RECORDS AVAILABLE: 1954-55, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 5, 1954	55.15	AUG. 26, 1954	55.94	MAY 11, 1955	55.36	JULY 5, 1968	60.62

11N/3W-27E1 S. DEPTH 15 FT IN 1955 AND 0 FT IN 1968. ALTITUDE ABOUT 2,080 FT.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 11, 1955	F	JULY 9, 1968	P				

11N/3W-27L1 S. DEPTH 58.5 FT IN 1968. ALTITUDE ABOUT 2,105 FT.
HIGHEST WATER LEVEL 66.20 FT BELOW LSD, MAY 11, 1955.
LOWEST STATIC WATER LEVEL 66.20 FT BELOW LSD, MAY 11, 1955.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 11, 1955	66.20	JULY 3, 1968	F				

11N/3W-27N2 S. DEPTH 4.0 FT IN 1968. ALTITUDE ABOUT 2,075 FT.
HIGHEST WATER LEVEL 28.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 28.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	28	JULY 9, 1968	F				

11N/3W-28H1 S. DEPTH 38.5 FT IN 1955 AND 37.4 FT IN 1968. ALTITUDE 2,079.1 FT.
HIGHEST WATER LEVEL 38.50 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 42.10 FT BELOW LSD, FEB. 9, 1934.
RECORDS AVAILABLE: 1930-34, 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	38.5	MAR. 10, 1932	41.5	DEC. 22, 1932	41.7	JUNE 26, 1953	F
MAY 31, 1930	41.3	MAR. 29	41.5	FEB. 9, 1934	42.1	JULY 2, 1968	F
FEB. 25, 1931	41.4	JULY 6	41.6	MAY 14, 1943	F		

11N/3W-28H2 S. DEPTH 3.7 FT IN 1968. ALTITUDE 2,077.8 FT.
HIGHEST WATER LEVEL 40.10 FT BELOW LSD, MAY 31, 1930, FEB. 25, 1931.
LOWEST STATIC WATER LEVEL 40.30 FT BELOW LSD, MAR. 10, 1932, MAR. 29, 1932, JULY 6, 1932.
RECORDS AVAILABLE: 1930-32, 1934, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 31, 1930	40.1	MAR. 10, 1932	40.3	JULY 6, 1932	40.3	JULY 9, 1968	F
FEB. 25, 1931	40.1	MAR. 29	40.3	FEB. 9, 1934	F		

11N/3W-28J1 S. DEPTH 41.6 FT IN 1919 AND 0 FT IN 1957 AND 1968. ALTITUDE ABOUT 2,080 FT.
HIGHEST WATER LEVEL 16.60 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 16.60 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919, 1957, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	16.6	JUNE 25, 1957	P	JULY 8, 1968	P		

11N/3W-28R1 S. DEPTH REPORTED 105 FT IN 1930 AND 60 FT IN 1953. ALTITUDE 2,073.56 FT.
HIGHEST WATER LEVEL 21.30 FT BELOW LSD, MAY 31, 1930.
LOWEST STATIC WATER LEVEL 31.69 FT BELOW LSD, JAN. 2, 1957.
RECORDS AVAILABLE: 1930-32, 1947-53, 1955-60.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 31, 1930	21.3	MAY 20, 1947	26.53	NOV. 8, 1950	27.31	JUNE 25, 1953	29.5
FEB. 25, 1931	21.4	NOV. 13	26.81	MAY 16, 1951	27.31	DEC. 12, 1955	30.65
AUG. 27	22.4	MAY 17, 1948	26.78	NOV. 27	27.64	APR. 12, 1956	31.02
MAR. 10, 1932	22.2	NOV. 18	26.82	MAY 30, 1952	27.98	JAN. 2, 1957	31.69
JULY 6	22.1	MAY 9, 1949	27.15	NOV. 26	28.93	NOV. 11, 1959	31.18
DEC. 22	22.9	NOV. 16	27.07	MAY 27, 1953	28.90	MAR. 23, 1960	30.88
JAN. 7, 1947	26.49	MAY 1, 1950	27.14				

11N/3W-28R2 S. DEPTH REPORTED 243 FT IN 1953. ALTITUDE ABOUT 2,075 FT.
HIGHEST WATER LEVEL 26.00 FT BELOW LSD, JUNE 26, 1953.
LOWEST STATIC WATER LEVEL 40.50 FT BELOW LSD, APR. 10, 1968.
RECORDS AVAILABLE: 1953-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 26, 1953	26.0	NOV. 18, 1959	30.87	MAR. 18, 1963	33.5	OCT. 19, 1966	38.51
MAR. 17, 1954	26.31	MAR. 2, 1960	30.88	OCT. 30	34.40	NOV. 17	38.3
DEC. 1	26.75	NOV. 16	32.00	JAN. 17, 1964	34.2	MAR. 15, 1967	39.70
MAR. 4, 1955	26.87	MAR. 8, 1961	32.07	MAR. 8	34.16	MAR. 31	38.7
NOV. 18	27.39	MAY 1	32.30	APR. 21	34.5	OCT. 23	38.84
MAR. 23, 1956	27.63	OCT. 27	32.85	OCT. 14	37.62	APR. 11, 1968	39.85
NOV. 2	28.18	NOV. 28	32.90	DEC. 21	36.5	MAY 2	39.2
MAR. 6, 1957	28.30	MAR. 15, 1962	32.79	MAR. 10, 1965	36.21	JULY 3	40.10
NOV. 8	28.94	MAR. 19	32.70	OCT. 18	37.84	NOV. 14	37.55
MAR. 11, 1958	29.00	NOV. 2	33.74	DEC. 8	37.2	NOV. 21	40.3
NOV. 6	29.74	NOV. 14	33.70	MAR. 16, 1966	38.00	APR. 8, 1969	40.46
MAR. 12, 1959	29.88	MAR. 13, 1963	33.56	MAY 4	38.3	APR. 10	40.5

11N/3W-30A1 S. DEPTH 5.4 FT IN 1969. ALTITUDE 2,030.8 FT.
HIGHEST WATER LEVEL 0.60 FT ABOVE LSD, MAY 8, 1942, NOV. 8, 1950, MAY 16, 1951, NOV. 27, 1951, MAY 30, 1952, NOV. 26, 1952, JUNE 25, 1953, NOV. 12, 1953, MAY 13, 1954, NOV. 22, 1954, MAY 11, 1955, NOV. 17, 1955, MAR. 23, 1956.
LOWEST STATIC WATER LEVEL 5.20 FT BELOW LSD, AUG. 27, 1931.
RECORDS AVAILABLE: 1930-32, 1934, 1942, 1950-58, 1960-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 31, 1930	2.9	MAY 11, 1955 +	.6 Q	OCT. 27, 1961	1.05	MAY 4, 1966	1.4
FEB. 25, 1931	2.7	NOV. 17 +	.6 Q	NOV. 28	1.00	OCT. 19	2.33
AUG. 27	5.2	MAR. 23, 1956 +	.6 Q	MAY 15, 1962	1.04	NOV. 17	2.2
MAR. 10, 1932	3.4	APR. 12	.6 Q	NOV. 2	1.05	MAR. 15, 1967	2.01
DEC. 22	4.1	NOV. 2	.6 Q	NOV. 14	1.0	MAR. 31	1.9
FEB. 9, 1934	4.0	DEC. 21	Q	MAR. 13, 1963	1.05	OCT. 23	2.65
MAY 8, 1942 +	.6 Q	MAR. 6, 1957	Q	MAR. 22	2.1	DEC. 7	2.2
NOV. 8, 1950 +	.6 Q	MAY 2	Q	OCT. 30	1.39	APR. 11, 1968	2.05
MAY 16, 1951 +	.6	NOV. 8	Q	JAN. 17, 1964	1.7	APR. 30	2.0
NOV. 27 +	.6 Q	DEC. 3	Q	MAR. 8	.01	JULY 18	2.84
MAY 30, 1952 +	.6 Q	MAR. 11, 1958	.47	APR. 21	1.4	NOV. 14	3.12
NOV. 26 +	.6 Q	DEC. 2	Q	OCT. 14	1.78	NOV. 21	3.2
JUNE 25, 1953 +	.6 Q	MAR. 2, 1960 +	.10	DEC. 3	1.7	APR. 8, 1969	2.22
NOV. 12 +	.6 Q	NOV. 16	.30	MAR. 9, 1965	1.64	APR. 10	2.2
MAY 13, 1954 +	.6 Q	MAR. 8, 1961	.01	MAY 19, 1964	1.7	AUG. 19	3.16
NOV. 22 +	.6 Q	MAY 1	.60	MAR. 16, 1966	1.51		

11N/3W-30A2 S. DEPTH 13.0 FT IN 1968. ALTITUDE 2,033.02 FT.
HIGHEST WATER LEVEL 0.0 FT ABOVE LSD, OCT. 27, 1961.
LOWEST STATIC WATER LEVEL 2.52 FT BELOW LSD, AUG. 19, 1969.
RECORDS AVAILABLE: 1919, 1922, 1931-32, 1942, 1950-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV. 1919	Q	NOV. 17, 1955	Q	MAR. 8, 1961	Q	OCT. 18, 1965	.83
MAY 1922	Q	DEC. 12	Q	MAY 1	Q	MAR. 16, 1966	.60
AUG. 1931	Q	MAR. 23, 1956	Q	OCT. 27	.00	MAY 4	.70
MAR. 1932	Q	APR. 12	Q	MAR. 15, 1962	.10	OCT. 19	1.20
DEC.	Q	NOV. 2	Q	MAR. 22	Q	NOV. 17	1.2
MAY 8, 1942	Q	DEC. 21	Q	NOV. 2	.58	MAR. 15, 1967	1.78
NOV. 8, 1950	Q	MAR. 6, 1957	Q	NOV. 14	.4	MAR. 31	1.7
MAY 16, 1951	Q	MAY 2	Q	MAR. 13, 1963	.28	OCT. 23	2.06
NOV. 27	Q	NOV. 8	Q	MAR. 18	.3	DEC. 7	1.8
MAY 30, 1952	Q	DEC. 3	Q	OCT. 30	.42	APR. 11, 1968	1.65
NOV. 26	Q	MAR. 11, 1958	Q	JAN. 17, 1964	1.9	APR. 30	1.7
NOV. 12, 1953	Q	MAR. 25	Q	MAR. 8	.64	JULY 18	2.20
MAR. 17, 1954	Q	NOV. 6	Q	APR. 21	1.8	NOV. 14	2.08
MAY 13	Q	DEC. 2	Q	OCT. 14	.65	NOV. 21	2.1
NOV. 17	Q	NOV. 18, 1959	Q	DEC. 3	2.3	APR. 8, 1969	1.93
DEC. 1	Q	MAR. 2, 1960	Q	MAR. 10, 1965	.41	APR. 11	1.9
APR. 14, 1955	Q	NOV. 16	Q	MAY 19	1.9	AUG. 19	2.52
MAY 11	Q						

11N/3W-34F1 S. DEPTH 39.0 FT IN 1968. ALTITUDE 2,085.46 FT.
HIGHEST WATER LEVEL 28.06 FT BELOW LSD, MAY 31, 1930.
LOWEST STATIC WATER LEVEL 39.60 FT BELOW LSD, MAR. 25, 1958.
RECORDS AVAILABLE: 1930-32, 1934-60, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 31, 1930	28.06	MAY 24, 1940	30.86	NOV. 13, 1947	33.79	MAY 17, 1954	37.30
FEB. 25, 1931	28.23	DEC. 5	31.17	MAY 17, 1948	33.84	NOV. 22	37.50
AUG. 27	28.23	JUNE 10, 1941	31.39	NOV. 18	34.00	APR. 14, 1955	37.59
MAR. 10, 1932	28.48	NOV. 13	31.50	MAY 9, 1949	34.36	DEC. 12	37.89
MAR. 29	28.40	MAY 8, 1942	31.70	NOV. 16	34.35	APR. 12, 1956	38.40
DEC. 22	28.53	NOV. 27	31.87	MAY 1, 1950	34.48	JAN. 2, 1957	39.07
FEB. 9, 1934	28.77	MAY 14, 1943	32.11	NOV. 8	34.74	MAY 2	39.00
MAR. 1, 1935	29.02	DEC. 22	32.33	MAY 16, 1951	34.90	DEC. 3	39.45
JAN. 3, 1936	29.40	APR. 22, 1944	33.28	NOV. 27	35.12	MAR. 25, 1958	39.60
JAN. 15, 1937	29.69	DEC. 12	32.72	MAY 30, 1952	35.25	DEC. 2	F
JUNE 21	29.85	MAY 4, 1945	32.86	NOV. 26	35.76	MAY 4, 1959	F
JUNE 1, 1938	30.15	NOV. 27	33.05	MAY 27, 1953	35.98	NOV. 11	F
NOV. 18	30.30	APR. 30, 1946	33.26	JUNE 26	36.15	MAR. 23, 1960	F
MAY 23, 1939	30.62	JAN. 7, 1947	33.86	NOV. 13	36.40	JULY 5, 1968	F
NOV. 25	30.70	MAY 20	33.57				

11N/3W-34G1 S. DEPTH 50.0 FT IN 1968. ALTITUDE ABOUT 2,100 FT.
HIGHEST WATER LEVEL 40.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 40.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	40	JULY 5, 1968	F				

11N/4W-1N1 S. DEPTH 17.6 FT. ALTITUDE ABOUT 2,074 FT.
HIGHEST WATER LEVEL 67.40 FT BELOW LSD, OCT. 31, 1950.
LOWEST STATIC WATER LEVEL 67.40 FT BELOW LSD, OCT. 31, 1950.
RECORDS AVAILABLE: 1950, 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 31, 1950	67.4	SEP. 2, 1953	D	JULY 10, 1968	P		

11N/4W-4J1 S. DEPTH 363 FT IN 1960. ALTITUDE ABOUT 2,040 FT.
HIGHEST WATER LEVEL 46.00 FT BELOW LSD, JULY 2, 1960.
LOWEST STATIC WATER LEVEL 78.56 FT BELOW LSD, JULY 10, 1968.
RECORDS AVAILABLE: 1960, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JULY 2, 1960	46	JULY 10, 1968	78.56				

11N/4W-4R1 S. DEPTH 38.6 FT IN 1968 AND 37.8 FT IN 1968. ALTITUDE ABOUT 2,036 FT.
HIGHEST WATER LEVEL 34.95 FT BELOW LSD, MAR. 17, 1954.
LOWEST STATIC WATER LEVEL 41.53 FT BELOW LSD, APR. 11, 1968.
RECORDS AVAILABLE: 1953-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP. 2, 1953	36.24	NOV. 8, 1957	35.89	MAR. 15, 1962	36.83	MAR. 16, 1966	37.64
MAR. 17, 1954	34.95	MAR. 11, 1958	35.94	NOV. 2	36.96	OCT. 19	38.30
JUNE 16	35.07	NOV. 6	36.06	MAR. 13, 1963	36.99	MAR. 15, 1967	37.87
DEC. 1	35.08	MAR. 12, 1959	36.16	OCT. 30	37.24	OCT. 23	37.45
MAR. 4, 1955	35.12	NOV. 18	36.34	MAR. 8, 1964	38.20	APR. 11, 1968	41.53
NOV. 17	35.37	MAR. 2, 1960	36.38	OCT. 14	38.66	JULY 3	38.10
MAR. 23, 1956	35.46	NOV. 16	36.53	MAR. 10, 1965	37.87	NOV. 14	F
NOV. 2	35.63	MAR. 8, 1961	36.60	OCT. 18	37.50	APR. 8, 1969	F
MAR. 6, 1957	35.62	OCT. 27	36.98				

11N/4W-6E1 S. DEPTH 63.0 FT IN 1968. ALTITUDE ABOUT 2,045 FT.
HIGHEST WATER LEVEL 29.77 FT BELOW LSD, MAR. 23, 1960.
LOWEST STATIC WATER LEVEL 43.06 FT BELOW LSD, JULY 17, 1968.
RECORDS AVAILABLE: 1956-61, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC. 21, 1956	34.90	MAR. 25, 1958	34.34	MAY 4, 1959	33.88	MAY 1, 1961	36.85
MAY 2, 1957	34.83	MAR. 25	34.33	NOV. 11	30.58	OCT. 27	30.05
DEC. 3	34.58	DEC. 2	34.32	MAR. 23, 1960	29.77	JULY 17, 1968	43.06

11N/4W-6M1 S. DEPTH 106 FT IN 1953 AND 68.0 FT IN 1968. ALTITUDE ABOUT 2,040 FT.
HIGHEST WATER LEVEL 40.60 FT BELOW LSD, OCT. 31, 1950.
LOWEST STATIC WATER LEVEL 72.17 FT BELOW LSD, APR. 8, 1969.
RECORDS AVAILABLE: 1950, 1953-60, 1962-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 31, 1950	40.6	MAR. 6, 1957	59.80	NOV. 2, 1962	55.10	OCT. 19, 1966	63.10
JUNE 17, 1953	47.55	NOV. 8	54.31	MAR. 13, 1963	53.96	MAR. 15, 1967	61.34
MAR. 17, 1954	46.32	MAR. 11, 1958	57.52	OCT. 30	55.79	OCT. 23	65.39
DEC. 1	49.75	NOV. 6	56.14	MAR. 8, 1964	54.81	APR. 11, 1968	67.98
MAR. 4, 1955	47.84	MAR. 12, 1959	54.20	OCT. 14	57.98	JULY 17	66.20
NOV. 17	51.52	NOV. 18	52.83	MAR. 10, 1965	56.81	NOV. 14	67.87
MAR. 23, 1956	51.28	MAR. 2, 1960	52.06	OCT. 18	60.74	APR. 8, 1969	72.17
NOV. 2	58.60	MAR. 15, 1962	52.14	MAR. 16, 1966	58.81		

11N/4W-12H1 S. DEPTH 58.0 FT IN 1968. ALTITUDE ABOUT 2,050 FT.
HIGHEST WATER LEVEL 47.30 FT BELOW LSD, NOV. 13, 1953.
LOWEST STATIC WATER LEVEL 56.90 FT BELOW LSD, MAY 1, 1961.
RECORDS AVAILABLE: 1953.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV. 13, 1953	47.30	DEC. 21, 1956	48.81	DEC. 2, 1958	50.22	MAR. 23, 1960	51.36
MAY 13, 1954	50.30	MAY 2, 1957	49.09	MAY 4, 1959	50.48	MAY 1, 1961	56.90
NOV. 22	49.30	DEC. 3	49.52	NOV. 11	50.82	JULY 10, 1968	56.48
APR. 14, 1955	50.43	MAR. 25, 1958	49.71				

11N/4W-18C1 S. DEPTH 182 FT IN 1953 AND 48.7 FT IN 1968. ALTITUDE ABOUT 2,035 FT.
HIGHEST WATER LEVEL 74.57 FT BELOW LSD, JUNE 17, 1953.
LOWEST STATIC WATER LEVEL 74.57 FT BELOW LSD, JUNE 17, 1953.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 17, 1953	74.57	JULY 17, 1968	F				

11N/4W-19E1 S. DEPTH 500 FT IN 1951. ALTITUDE ABOUT 2,065 FT.
HIGHEST WATER LEVEL 178.70 FT BELOW LSD, JUNE 12, 1953.
LOWEST STATIC WATER LEVEL 178.70 FT BELOW LSD, JUNE 12, 1953.
RECORDS AVAILABLE: 1953.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 12, 1953	178.7						

11N/4W-19G1 S. DEPTH 500 FT IN 1951. ALTITUDE ABOUT 2,045 FT.
HIGHEST WATER LEVEL 100.00 FT BELOW LSD, APR. , 1951.
LOWEST STATIC WATER LEVEL 153.26 FT BELOW LSD, JULY 16, 1968.
RECORDS AVAILABLE: 1951, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 1951	100	JULY 16, 1968	153.26				

11N/4W-19H1 S. DEPTH 210 FT IN 1936. ALTITUDE 2,039.1 FT.
HIGHEST WATER LEVEL 76.70 FT BELOW LSD, OCT. 30, 1950.
LOWEST STATIC WATER LEVEL 133.79 FT BELOW LSD, JULY 16, 1968.
RECORDS AVAILABLE: 1950, 1953-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 30, 1950	76.7	DEC. 3, 1957	101.17	MAR. 22, 1962	82.90	MAY 5, 1966	119.9
JUNE 10, 1953	108.5 A	MAR. 25, 1958	96.80	NOV. 14	84.9	NOV. 17	112.8
NOV. 12	95.60	DEC. 2	103.69	MAR. 18, 1963	87.3	MAR. 31, 1967	117.1
NOV. 17, 1954	98.30	MAY 4, 1959	82.09	JAN. 17, 1964	88.7	DEC. 7	116.0
APR. 14, 1955	112.20	NOV. 11	86.49	APR. 21	93.4	APR. 30, 1968	122.4
DEC. 12	96.10	MAR. 23, 1960	81.20	DEC. 3	88.2	JULY 16	133.79
APR. 12, 1956	106.00	MAY 1, 1961	86.20	MAY 19, 1965	85.7	NOV. 15	124.1
DEC. 21	101.05	NOV. 28	83.70	DEC. 8	80.3	APR. 11, 1969	111.8
MAY 2, 1957	114.37						

11N/4W-19L1 S. DEPTH 350 FT IN 1951. ALTITUDE ABOUT 2,055 FT.
HIGHEST WATER LEVEL 100.00 FT BELOW LSD, MAR. , 1951.
LOWEST STATIC WATER LEVEL 160.38 FT BELDW LSD, NOV. 14, 1968.
RECORDS AVAILABLE: 1951, 1953-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR. 1951	100	MAR. 6, 1957	124.66	OCT. 27, 1961	113.16	OCT. 19, 1965	164.82A
JUNE 12, 1953	144.6	NOV. 8	136.72	MAR. 15, 1962	115.25	MAR. 16, 1966	134.61
MAR. 17, 1954	134.68	MAR. 11, 1958	134.58	NOV. 2	121.65	OCT. 19	158.70A
DEC. 1	125.5	MAR. 11, 1959	126.06	MAR. 13, 1963	120.72	MAR. 15, 1967	146.09A
MAR. 4, 1955	130.72	NOV. 18	114.42	OCT. 30	121.08	OCT. 23	162.60A
NOV. 17	131.63	MAR. 2, 1960	113.28	MAR. 8, 1964	120.72	APR. 11, 1968	155.90
MAR. 23, 1956	136.88	NOV. 17	102.82	OCT. 14	140.64	NOV. 14	160.38
NOV. 1	156.40	MAR. 9, 1961	106.91	MAR. 10, 1965	129.26	APR. 8, 1969	151.45

11N/4W-19R1 S. ALTITUDE ABOUT 2,044 FT.
HIGHEST WATER LEVEL 125.00 FT BELOW LSD, JUNE 10, 1953.
LOWEST STATIC WATER LEVEL 125.00 FT BELOW LSD, JUNE 10, 1953.
RECORDS AVAILABLE: 1953.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 10, 1953	125.0						

11N/4W-20E1 S. DEPTH 270 FT IN 1955. ALTITUDE ABOUT 2,035 FT.
HIGHEST WATER LEVEL 92.00 FT BELOW LSD, MAR. 26, 1955.
RECORDS AVAILABLE: 1955.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR. 26, 1955	92 A						

11N/4W-28N1 S. DEPTH 253 FT IN 1918. WELL BEING REORILLED IN JULY 1968, DEPTH 350 FT AND STILL ORILLING. ALTITUDE ABOUT 2,040 FT.
HIGHEST WATER LEVEL 59.05 FT BELOW LSD, MAR. 18, 1951.
LOWEST STATIC WATER LEVEL 118.40 FT BELOW LSD, APR. 30, 1968.
RECORDS AVAILABLE: 1951, 1953-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR. 18, 1951	59.05	DEC. 3, 1957	92.98	NOV. 14, 1962	85.5	MAY 5, 1966 .	109.0
APR. 15, 1953	75.49	MAR. 25, 1958	86.26	MAR. 18, 1963	83.4	NOV. 17	101.7
NOV. 12	81.40	DEC. 2	91.43	JAN. 17, 1964	83.5	MAR. 31, 1967	107.5
MAY 13, 1954	83.50	MAY 4, 1959	70.27	APR. 21, 1963	87.5	DEC. 7	102.5 A
NOV. 17	81.35	NOV. 11	83.12	DEC. 3, 1964	87.6	APR. 30, 1968	118.4
APR. 14, 1955	82.93	MAR. 23, 1960	76.87	MAY 19, 1965	93.8	NOV. 15	111.0
APR. 12, 1956	95.30	MAY 1, 1961	82.44	DEC. 8	92.0	APR. 15, 1969	113.5
MAY 2, 1957	92.36	NOV. 28	85.29				

11N/4W-28Q1 S. DEPTH 214.7 FT IN 1968. ALTITUDE ABOUT 2,035 FT.
HIGHEST WATER LEVEL 18.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 124.53 FT BELOW LSD, JULY 18, 1968.
RECORDS AVAILABLE: 1919, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	18	JULY 18, 1968	124.53				

11N/4W-29Q1 S. ALTITUDE ABOUT 2,055 FT.
HIGHEST WATER LEVEL 90.58 FT BELOW LSD, NOV. 17, 1960.
LOWEST STATIC WATER LEVEL 97.56 FT BELOW LSD, NOV. 18, 1959.
RECORDS AVAILABLE: 1959-60.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV. 18, 1959	97.56	MAR. 2, 1960	94.68	NOV. 17, 1960	90.58		

11N/4W-29R1 S. DEPTH 500 FT IN 1952 AND 303.0 FT IN 1968. ALTITUDE ABOUT 2,045 FT.
HIGHEST WATER LEVEL 83.42 FT BELOW LSD, NOV. 17, 1960.
LOWEST STATIC WATER LEVEL 133.56 FT BELOW LSD, JULY 11, 1968.
RECORDS AVAILABLE: 1953-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 16, 1953	94.9	NOV. 8, 1957	97.62	MAR. 13, 1963	91.51	OCT. 19, 1966	113.93
MAR. 17, 1954	85.33	MAR. 11, 1958	96.72	OCT. 30	95.71	MAR. 15, 1967	108.18
DEC. 1	89.27	MAR. 11, 1959	94.66	MAR. 8, 1964	91.02	OCT. 23	115.87
MAR. 4, 1955	86.82	NOV. 17, 1960	83.42	OCT. 14	101.88	APR. 11, 1968	126.65
NOV. 17	94.06	MAR. 9, 1961	87.59	MAR. 10, 1965	96.47	JULY 11	133.56
MAR. 22, 1956	95.17	OCT. 27	89.83	OCT. 19	111.35	NOV. 14	119.02
NOV. 1	98.80	MAR. 15, 1962	91.64	MAR. 16, 1966	104.65	APR. 8, 1969	121.00
MAR. 6, 1957	91.12	NOV. 2	94.67				

11N/4W-30C1 S. DEPTH 180 FT IN 1933 AND 150.5 FT IN 1968. ALTITUDE ABOUT 2,065 FT.
HIGHEST WATER LEVEL 148.80 FT BELOW LSD, JUNE 9, 1953.
LOWEST STATIC WATER LEVEL 148.80 FT BELOW LSD, JUNE 9, 1953.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 9, 1953	148.8	JULY 12, 1968	F				

11N/4W-30C2 S. DEPTH 70 FT IN 1919 AND 10.5 FT IN 1968. ALTITUDE ABOUT 2,065 FT.
HIGHEST WATER LEVEL 10.00 FT BELOW LSD, JULY 12, 1968.
LOWEST STATIC WATER LEVEL 28.50 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	28.5	JULY 12, 1968	10.0				

11N/4W-30N2 S. DEPTH 500 FT IN 1952. ALTITUDE ABOUT 2,100 FT.
HIGHEST WATER LEVEL 158.90 FT BELOW LSD, OCT. 22, 1952.
LOWEST STATIC WATER LEVEL 158.90 FT BELOW LSD, OCT. 22, 1952.
RECORDS AVAILABLE: 1952.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 22, 1952	158.90						

11N/4W-30N3 S. DEPTH 221 FT IN 1919 AND 0 FT IN 1968. ALTITUDE ABOUT 2,100 FT.
HIGHEST WATER LEVEL 16.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 16.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	16	JULY 12, 1968	P				

11N/4W-30P1 S. DEPTH 415 FT IN 1953. ALTITUDE ABOUT 2,095 FT.
HIGHEST WATER LEVEL 128.99 FT BELOW LSD, NOV. 17, 1960.
LOWEST STATIC WATER LEVEL 172.54 FT BELOW LSD, JULY 12, 1968.
RECORDS AVAILABLE: 1953-55, 1957-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 10, 1953	147.2	MAR. 11, 1959	152.40	NOV. 2, 1967	151.40C	OCT. 19, 1966	158.10
MAR. 17, 1954	141	NOV. 18	149	MAR. 13, 1963	145.99C	MAR. 15, 1967	157.15
DEC. 1	158.64	DEC. 1	140.22	OCT. 30	141.97	OCT. 23	170.89
MAR. 4, 1955	142.64	MAR. 2, 1960	134.60	MAR. 8, 1964	141.14	APR. 11, 1968	166.59
NOV. 17	151.47	NOV. 17	128.99	OCT. 14	152.55D	JULY 12	172.54
MAR. 6, 1957	152.52	MAR. 9, 1961	135.21	MAR. 10, 1965	144.04	NOV. 14	171.85
NOV. 8	158.89	OCT. 27	133.59	OCT. 19	152.48	APR. 8, 1969	170.80
NOV. 6, 1958	160	MAR. 15, 1962	134.95	MAR. 16	147.21		

11N/4W-30R1 S. ALTITUDE ABOUT 2,070 FT.
HIGHEST WATER LEVEL 134.10 FT BELOW LSD, JUNE 10, 1953.
LOWEST STATIC WATER LEVEL 134.10 FT BELOW LSD, JUNE 10, 1953.
RECORDS AVAILABLE: 1953.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 10, 1953	134.1						

11N/4W-31A1 S. DEPTH 300 FT IN 1948 AND 294.7 FT IN 1968. ALTITUDE 2,075.8 FT.
HIGHEST WATER LEVEL 79.00 FT BELOW LSD, FEB. 17, 1949.
LOWEST STATIC WATER LEVEL 166.64 FT BELOW LSD, JULY 11, 1968.
RECORDS AVAILABLE: 1946-53, 1957-60, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JULY 25, 1946	95.2	JAN. 23, 1947	80.4	OCT. 13, 1948	97.5	MAR. 20, 1951	106.4
JULY 31	95.3	FEB. 20	79.8	JAN. 17, 1949	91.8	APR. 18	116.6
AUG. 8	96.5	MAR. 21	83.6	FEB. 17	79.0	JUNE 14	120.02
AUG. 22	96.2	APR. 9	88.2	APR. 14	91.1	SEP. 13	124.99
SEP. 6	94.1	APR. 30	87.7	JUNE 16	107.1	OCT. 16	118.89
SEP. 16	92.7	JUNE 12	101.1	AUG. 18	108.7	DEC. 13	118.7
SEP. 23	92.5	JULY 10	98.1	SEP. 15	108.0	JAN. 22, 1952	111.7
SEP. 30	98.6	AUG. 11	93.7	DEC. 14	96.3	MAR. 13	110.16
OCT. 6	98.9	SEP. 4	92.7	JAN. 24, 1950	91.2	JUNE 12	105.42
OCT. 15	95.7	OCT. 15	93.7	FEB. 15	89.6	JULY 16	125.21
OCT. 21	95.3	FEB. 16, 1948	81.9	APR. 19	91.3	DEC. 16	116.70
OCT. 28	89.0	MAR. 11	83.4	JUNE 15	107.2	JUNE 9, 1953	128.0
NOV. 6	85.9	APR. 15	90.4	AUG. 15	119.7	NOV. 8, 1957	138.24
NOV. 18	84.5	JUNE 14	97.1	SEP. 14	115.6	MAR. 11, 1958	138
DEC. 2	83.1	JULY 13	100.7	DEC. 13	108.5	NOV. 18, 1959	130
DEC. 17	82.1	AUG. 10	106.2	JAN. 16, 1951	103.7	NOV. 17, 1960	148
JAN. 1, 1947	81.2	SEP. 14	117	FEB. 14	103.7	JULY 11, 1968	166.64

11N/4W-31H1 S. DEPTH 165 FT IN 1967 AND 141.7 FT IN 1968. ALTITUDE 2,076.1 FT.
HIGHEST WATER LEVEL 112.11 FT BELOW LSD, MAR. 15, 1953.
LOWEST STATIC WATER LEVEL 149.70 FT BELOW LSD, MAR. 31, 1967.
RECORDS AVAILABLE: 1953-68.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 16, 1953	118.60	DEC. 12, 1955	131.20	NOV. 11, 1959	126.08	APR. 21, 1964	128.1
FEB. 18	120.15	APR. 12, 1956	132.82	MAR. 23, 1960	128.85	DEC. 3	130.2
MAR. 15	112.11	DEC. 21	132.95	MAY 1, 1961	124.70	MAY 19, 1965	140.7
APR. 15	122.68	MAY 2, 1957	135.76	NOV. 28	124.45	DEC. 8	134.5
NOV. 12	129.65	DEC. 3	133.82	MAR. 22, 1962	124.70	MAY 5, 1966	139.9
MAY 13, 1954	128.40	MAR. 25, 1958	130.92	NOV. 14	128.5	MAR. 31, 1967	149.7
NOV. 17	129.15	DEC. 1	137.30	MAR. 18, 1963	126.2	DEC. 27	F
APR. 14, 1955	134.30	MAY 4, 1959	135.93	JAN. 17, 1964	126.9	JULY 11, 1968	F

11N/4W-32A1 S. DEPTH 425 FT IN 1967. ALTITUDE ABOUT 2,050 FT.
HIGHEST WATER LEVEL 135.00 FT BELOW LSD, SEP. 25, 1967.
LOWEST STATIC WATER LEVEL 135.00 FT BELOW LSD, SEP. 25, 1967.
RECORDS AVAILABLE: 1967.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP. 25, 1967	135						

11N/4W-32D1 S. DEPTH 500 FT IN 1951. ALTITUDE ABOUT 2,075 FT.
HIGHEST WATER LEVEL 141.30 FT BELOW LSD, DEC. 7, 1967.
LOWEST STATIC WATER LEVEL 151.00 FT BELOW LSD, NOV. 15, 1968.
RECORDS AVAILABLE: 1967-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC. 7, 1967	141.3	APR. 30, 1968	149.2 A	NOV. 15, 1968	151.0	APR. 11, 1969	148.5

11N/4W-32D2 S. DEPTH 500 FT IN 1951. ALTITUDE ABOUT 2,060 FT.
HIGHEST WATER LEVEL 100.00 FT BELOW LSD, APR. , 1951.
LOWEST STATIC WATER LEVEL 146.67 FT BELOW LSD, JULY 11, 1968.
RECORDS AVAILABLE: 1951, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 1951	100	JULY 11, 1968	146.67				

11N/4W-32F1 S. DEPTH 225 FT IN 1953. ALTITUDE ABOUT 2,080 FT.
HIGHEST WATER LEVEL 96.00 FT BELOW LSD, JULY 11, 1968.
LOWEST STATIC WATER LEVEL 124.80 FT BELOW LSD, JUNE 9, 1953.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 9, 1953	124.8	JULY 11, 1968	96				

11N/4W-32L1 S. DEPTH 272 FT IN 1925 AND 241.5 FT IN 1968. ALTITUDE ABOUT 2,090 FT.
HIGHEST WATER LEVEL 110.00 FT BELOW LSD, MAY , 1949.
LOWEST STATIC WATER LEVEL 165.30 FT BELOW LSD, JULY 11, 1968.
RECORDS AVAILABLE: 1949, 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 1949	110	JUNE 9, 1953	131.7	JULY 11, 1968	165.30		

11N/4W-34D1 S. DEPTH 222 FT IN 1919 AND 0 FT IN 1968. ALTITUDE ABOUT 2,035 FT.
HIGHEST WATER LEVEL 16.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 16.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1916.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	16	JULY 18, 1968	P				

11N/4W-35F1 S. DEPTH 80.8 FT IN 1955 AND 26.2 FT IN 1968. ALTITUDE ABOUT 2,050 FT.
HIGHEST WATER LEVEL 32.92 FT BELOW LSD, MAY 10, 1955.
LOWEST STATIC WATER LEVEL 32.92 FT BELOW LSD, MAY 10, 1955.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 10, 1955	32.92	JULY 17, 1968	F				

11N/4W-35G1 S. DEPTH 37.1 FT IN 1953, 30.3 FT IN 1964, AND 13.1 FT IN 1968. ALTITUDE ABOUT 2,050 FT.
HIGHEST WATER LEVEL 30.87 FT BELOW LSD, MAY 4, 1959.
LOWEST STATIC WATER LEVEL 32.00 FT BELOW LSD, NOV. 17, 1954.
RECORDS AVAILABLE: 1953-64, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 15, 1953	31.47	APR. 12, 1956	31.06	MAY 4, 1959	30.87	NOV. 14, 1962	31.1
JUNE 25	31.58	DEC. 21	30.97	NOV. 11	30.95	MAR. 18, 1963	31.0
NOV. 12	31.60	MAY 2, 1957	30.94	MAR. 23, 1960	31.06	JAN. 17, 1964	F
MAY 13, 1954	31.40	DEC. 3	30.95	MAY 1, 1961	31.00	APR. 21	F
NOV. 17	32.00	MAR. 25, 1958	30.93	NOV. 28	31.00	DEC. 3	F
APR. 14, 1955	31.53	DEC. 2	30.98	MAR. 22, 1962	31.00	JULY 17, 1968	F
DEC. 12	31.12						

11N/5W-1N1 S. DEPTH 30 FT IN 1953 AND 74.0 FT IN 1968. ALTITUDE ABOUT 2,060 FT.
HIGHEST WATER LEVEL 52.00 FT BELOW LSD, OCT. 31, 1950.
LOWEST STATIC WATER LEVEL 73.87 FT BELOW LSD, JULY 24, 1968.
RECORDS AVAILABLE: 1950, 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 31, 1950	52.0	JUNE 17, 1953	F	JULY 24, 1968	73.87		

11N/5W-2B1 S. DEPTH 158 FT IN 1953 AND 155.0 FT IN 1968. ALTITUDE ABOUT 2,102 FT.
HIGHEST WATER LEVEL 97.00 FT BELOW LSD, OCT. 31, 1950.
LOWEST STATIC WATER LEVEL 114.18 FT BELOW LSD, JULY 24, 1968.
RECORDS AVAILABLE: 1950, 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 31, 1950	97.0	JUNE 17, 1953	99.65	JULY 24, 1968	114.18		

11N/5W-2B2 S. DEPTH 115 FT IN 1953 AND 111.0 FT IN 1968. ALTITUDE ABOUT 2,102 FT.
HIGHEST WATER LEVEL 98.82 FT BELOW LSD, JUNE 17, 1953.
LOWEST STATIC WATER LEVEL 98.82 FT BELOW LSD, JUNE 17, 1953.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 17, 1953	98.82	JULY 24, 1968	F				

11N/5W-2D1 S. DEPTH 142 FT IN 1953 AND 0 FT IN 1968. ALTITUDE ABOUT 2,100 FT.
HIGHEST WATER LEVEL 131.10 FT BELOW LSD, JUNE 17, 1953.
LOWEST STATIC WATER LEVEL 165.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919, 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	165	JUNE 17, 1953	131.1	JULY 24, 1968	P		

11N/5W-12G1 S. DEPTH 248.6 FT IN 1955 AND 121.0 FT IN 1968. ALTITUDE ABOUT 2,055 FT.
HIGHEST WATER LEVEL 67.84 FT BELOW LSD, MAY 10, 1955.
LOWEST STATIC WATER LEVEL 85.09 FT BELOW LSD, JULY 15, 1968.
RECORDS AVAILABLE: 1955, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 10, 1955	67.84	JULY 15, 1968	85.09				

11N/5W-12M1 S. DEPTH 58 FT IN 1919 AND 20.0 FT IN 1968. ALTITUDE ABOUT 2,070 FT.
HIGHEST WATER LEVEL 48.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 48.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	48	JULY 24, 1968	F				

11N/5W-13H1 S. DEPTH 325 FT IN 1950 AND 385.6 FT IN 1968. ALTITUDE 2,036.2 FT.
HIGHEST WATER LEVEL 64.00 FT BELOW LSD, OCT. 30, 1950.
LOWEST STATIC WATER LEVEL 104.44 FT BELOW LSD, JULY 17, 1968.
RECORDS AVAILABLE: 1950, 1953-69.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 30, 1950	64.0	APR. 12, 1956	88.58	MAY 1, 1961	68.40	DEC. 8, 1965	83.3
MAR. 18, 1953	66.69	DEC. 21	86.09	NOV. 28	70.60	MAY 5, 1966	93.7
APR. 15	77.55	MAY 2, 1957	91.61	MAR. 22, 1962	68.40	NOV. 17	95.1
JUNE 17	84.7	DEC. 3	86.73	NOV. 14	76.4	MAR. 31, 1967	95.1
NOV. 12	81.65	MAR. 25, 1958	83.32	MAR. 18, 1963	73.8	DEC. 7	97.4
MAY 13, 1954	85.30	DEC. 1	87.28	JAN. 17, 1964	75.3	APR. 30, 1968	98.9
NOV. 17	84.50	MAY 4, 1959	79.15	APR. 21	81.9	JULY 17	104.44
APR. 14, 1955	84.00	NOV. 11	74.12	DEC. 3	81.9	NOV. 15	100.8
DEC. 12	82.71	MAR. 23, 1960	71.50	MAY 14, 1965	88.3	APR. 11, 1969	97.6

11N/5W-13Q1 S. DEPTH 285 FT IN 1953 AND 182.0 FT IN 1968. ALTITUDE ABOUT 2,050 FT.
HIGHEST WATER LEVEL 125.30 FT BELOW LSD, JUNE 16, 1953.
LOWEST STATIC WATER LEVEL 154.01 FT BELOW LSD, JULY 17, 1968.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 16, 1953	125.3	JULY 17, 1968	154.01				

11N/5W-14R1 S. DEPTH 153 FT IN 1953 AND 14.0 FT IN 1968. ALTITUDE ABOUT 2,065 FT.
HIGHEST WATER LEVEL 26.10 FT BELOW LSD, JUNE 18, 1953.
LOWEST STATIC WATER LEVEL 26.10 FT BELOW LSD, JUNE 18, 1953.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 18, 1953	26.1	JULY 16, 1968	F				

11N/5W-24A1 S. DEPTH 300 FT IN 1938. ALTITUDE ABOUT 2,042 FT.
HIGHEST WATER LEVEL 16.60 FT BELOW LSD, JULY 25, 1946.
LOWEST STATIC WATER LEVEL 135.98 FT BELOW LSD, MAY 2, 1957.
RECORDS AVAILABLE: 1946, 1948-63.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JULY 25, 1946	16.6	MAR. 15, 1950	80.4	DEC. 13, 1951	79.52	APR. 12, 1956	132.65
JULY 31	30.8	APR. 19	90.1	JAN. 22, 1952	69.13	DEC. 21	125.95
AUG. 7	29.2	JUNE 15	111.4	FEB. 14	70.77	MAY 2, 1957	135.98
AUG. 22	48.6	JULY 12	112.5	MAR. 13	71.80	DEC. 2	126.92
MAR. 11, 1948	68.5	AUG. 15	108.6	APR. 10	80.13	MAR. 25, 1958	120.11
JAN. 17, 1949	61.5	SEP. 14	102.8	DEC. 16	83.75	DEC. 1	112.83
FEB. 17	62.5	OCT. 17	99.1	JAN. 16, 1953	82.6	MAY 4, 1959	84.54
MAR. 16	67.0	DEC. 13	82.8	FEB. 18	89.82	NOV. 11	93.31
APR. 14	79.9	FEB. 14, 1951	77.8	MAR. 18	92.80	MAR. 23, 1960	91.13
JUNE 16	108.0	MAR. 20	95.8	APR. 15	99.38	MAY 1, 1961	63.00
JULY 14	109.1	JUNE 14	107.55	NOV. 12	109.23	NOV. 28	68.30
AUG. 18	109.1	JULY 18	104.78	MAY 13, 1954	114.80	MAR. 22, 1962	63.00
SEP. 15	109.7	AUG. 15	105.45	NOV. 17	119.50	NOV. 14	72.8
OCT. 19	95.0	SEP. 13	105.40	APR. 14, 1955	124.50	MAR. 18, 1963	68.1
FEB. 15, 1950	69.9	OCT. 16	100.73	DEC. 12	119.10		

11N/5W-24E1 S. DEPTH 250 FT IN 1938. ALTITUDE ABOUT 2,075 FT.
HIGHEST WATER LEVEL 160.00 FT BELOW LSD, JUNE 11, 1953.
LOWEST STATIC WATER LEVEL 160.00 FT BELOW LSD, JUNE 11, 1953.
RECORDS AVAILABLE: 1953.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUNE 11, 1953	160						

11N/5W-24F1 S. DEPTH 367 FT IN 1967. ALTITUDE ABOUT 2,070 FT.
HIGHEST WATER LEVEL 188.00 FT BELOW LSD, MAY 22, 1967.
LOWEST STATIC WATER LEVEL 188.00 FT BELOW LSD, MAY 22, 1967.
RECORDS AVAILABLE: 1967.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 22, 1967	188						

11N/5W-24P1 S. DEPTH 430 FT IN 1950. ALTITUDE ABOUT 2,100 FT.
HIGHEST WATER LEVEL 180.00 FT BELOW LSD, NOV. 15, 1950.
LOWEST STATIC WATER LEVEL 180.00 FT BELOW LSD, NOV. 15, 1950.
RECORDS AVAILABLE: 1950.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV. 15, 1950	180						

11N/5W-24Q1 S. DEPTH 536 FT IN 1950. ALTITUDE ABOUT 2,090 FT.
HIGHEST WATER LEVEL 178.00 FT BELOW LSD, DEC. 15, 1950.
LOWEST STATIC WATER LEVEL 178.00 FT BELOW LSD, DEC. 15, 1950.
RECORDS AVAILABLE: 1950.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC. 15, 1950	178						

11N/6W-17L1 S. DEPTH 618 FT IN 1950. ALTITUDE ABOUT 2,560 FT.
HIGHEST WATER LEVEL 287.08 FT BELOW LSD, AUG. 9, 1968.
LOWEST STATIC WATER LEVEL 330.30 FT BELOW LSD, OCT. 20, 1952.
RECORDS AVAILABLE: 1950, 1952, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC. 1950	288	OCT. 20, 1952	330.30	AUG. 9, 1968	287.08		

11N/6W-17P1 S. DEPTH 597 FT IN 1950. ALTITUDE ABOUT 2,570 FT.
HIGHEST WATER LEVEL 273.00 FT BELOW LSD, NOV. , 1950.
LOWEST STATIC WATER LEVEL 317.00 FT BELOW LSD, OCT. 24, 1952.
RECORDS AVAILABLE: 1950, 1952.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV. 1950	273	OCT. 24, 1952	317.0				

11N/6W-17P2 S. DEPTH 647 FT IN 1953. ALTITUDE ABOUT 2,550 FT.
HIGHEST WATER LEVEL 262.00 FT BELOW LSD, JULY 13, 1953.
LOWEST STATIC WATER LEVEL 265.52 FT BELOW LSD, AUG. 9, 1968.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JULY 13, 1953	262.0	AUG. 9, 1968	265.52				

11N/6W-20A1 S. DEPTH 712 FT IN 1950 AND 451.5 FT IN 1968. ALTITUDE ABOUT 2,535 FT.
HIGHEST WATER LEVEL 247.20 FT BELOW LSD, SEP. 11, 1952, OCT. 24, 1952.
LOWEST STATIC WATER LEVEL 252.00 FT BELOW LSD, SEP. , 1950.
RECORDS AVAILABLE: 1950, 1952, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP. 1950	252	SEP. 11, 1952	247.20	OCT. 24, 1952	247.2	JULY 25, 1968	248.80

11N/6W-20Z1 S. DEPTH 308 FT IN 1919 AND 0 FT IN 1968. ALTITUDE ABOUT 2,535 FT.
HIGHEST WATER LEVEL 280.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 280.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	280	JULY 25, 1968	P				

11N/7W-13R1 S. DEPTH 404 FT IN 1952 AND 307.0 FT IN 1968. ALTITUDE ABOUT 2,560 FT.
HIGHEST WATER LEVEL 269.20 FT BELOW LSD, OCT. 23, 1952.
LOWEST STATIC WATER LEVEL 283.47 FT BELOW LSD, JULY 25, 1968.
RECORDS AVAILABLE: 1952, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 23, 1952	269.2	JULY 25, 1968	283.47				

11N/7W-26Z1 S. DEPTH 310 FT IN 1919 AND 0 FT IN 1968. ALTITUDE ABOUT 2,518 FT.
HIGHEST WATER LEVEL 250.00 FT BELOW LSD, , 1919.
LOWEST STATIC WATER LEVEL 250.00 FT BELOW LSD, , 1919.
RECORDS AVAILABLE: 1919.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1919	250	JULY 26, 1968	P				

12N/4W-34C1 S. DEPTH 2,650 FT IN 1952, 375 FT IN 1953, AND 0 FT IN 1968. ALTITUDE ABOUT 2,150 FT.
HIGHEST WATER LEVEL 136.55 FT BELOW LSD, SEP. 2, 1953.
LOWEST STATIC WATER LEVEL 136.55 FT BELOW LSD, SEP. 2, 1953.
RECORDS AVAILABLE: 1953, 1968.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP. 2, 1953	136.55	JULY 3, 1968	P				

TABLE 3.--Driller's Logs

The depth given in this table is the depth reported by the driller and is not necessarily the developed depth of the well. The depth given in tables 1 and 2 is a measured or reported depth on the date indicated.

	Thickness (feet)	Depth (feet)

28S/45E-26Z1 M. Drilled by Evans Bros. Drilling Co. in 1952. Altitude about 2,730 feet.

Alluvium, bedrock at 180 feet----------	180	180

30S/43E-32N1 M. Drilled by Suffdy and Halstead in 1957. 14-inch casing 0-20 feet and 10-inch casing 0-429 feet; perforated 229-429 feet. Altitude about 2,840 feet.

Sand, silty, with few clay lenses and a trace of gravel----------	75	75
Sand, with clay---	10	85
Sand, fine to coarse, with a few clay lenses and a trace of gravel----------	80	165
Sand, with clay---	60	225
Sand, with a trace of gravel and thin lenses of clay----------	155	380
Sand----------	3	383
Sand, with gravel, cemented---------	4	387
Sand----------	42	429

30S/45E-14A1 M. Drilled in 1916. 8-inch casing. Altitude about 3,200 feet.

Alluvium----------	85	85
Bedrock----------	20	105

30S/45E-24P1 M. Drilled in 1916. Altitude about 3,100 feet.

Alluvium, with bedrock at 85 feet----------	85	85

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

30S/46E-19M1 M. Drilled in 1916. Altitude about 3,110 feet.

Alluvium with bedrock at 99 feet----------				99	99

31S/41E-31N1 M. Monolith Cement Co. Altitude about 2,775 feet.

Soil----------	5	5	Sand, fine--------	11	238
Clay, cemented,---			Clay, soft--------	16	254
with some rock---	195	200	Sand, coarse------	63	317
Clay, white-------	27	227	Clay----------	27	344

31S/45E-14L1 M. Altitude about 3,015 feet.

Alluvium----------	92.5	92.5	Bedrock----------	12.5	105

31S/46E-2M1 M. Drilled in 1915. Altitude about 3,020 feet.

Alluvium with bedrock at 225 feet----------				225	225

31S/46E-19J1 M. Altitude about 3,015 feet.

Alluvium----------	54	54	Quartzite---------	96	150

31S/46E-19M1 M. Altitude about 3,020 feet.

Alluvium with bedrock at 120 feet----------				120	120

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

31S/46E-19R1 M. Drilled in 1914. Altitude about 3,020 feet.

Alluvium----------	60	60	Bedrock----------	133	193

31S/46E-21M1 M. Drilled in 1915. Altitude about 3,042 feet.

Alluvium----------	135	135	Bedrock----------	15	150

32S/41E-15J1. M. Monolith Cement Co. Drilled by K. S. Dixon in 1946. Altitude about 2,745 feet.

Rock and clay-----	100	100	Shell, hard-------	10	200
Rock--------------	3	103	Sand--------------	4	204
Clay, sticky------	47	150	Shell, hard-------	4	208
Rock--------------	4	154	Clay, sticky, and borax----------	12	220
Clay, hard, and packed----------	6	160	Shell, hard, and rock----------	30	250
Clay, sticky------	20	180	Clay, sandy-------	55	305
Rock--------------	8	188			
Clay, sticky------	2	190			

11N/3W-8N1 S. Drilled by R. L. Triplett in 1949. 8-inch casing. Altitude about 2,040 feet.

Sand--------------	35	35	Basalt------------	144	614
Clay, red and green----------	90	125	Clay, sand, and gravel----------	469	1,083
Sand--------------	197	322	Basalt------------	21	1,104
Clay--------------	8	330	Clay--------------	13	1,117
Sand and gravel---	140	470			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

11N/3W-23N1 S. Drilled by Howard Pump Co. in 1956. Altitude about 2,180 feet.

Sand and gravel, top soil	25	25	Clay and gravel, hard	73	158
Sand, fine, and clay	25	50	Clay and coarse gravel	27	185
Sand, coarse	10	60	Clay, clean and hard gravel	65	250
Sand, coarse, and clay	10	70	Clay, soft and yellow, and coarse gravel	45	295
Gravel, hard	5	75	Basalt, black	1	296
Clay and coarse sand	10	85			

11N/4W-4M1 S. Drilled by R. L. Triplett in 1950. Altitude about 2,035 feet.

Clay	7	7	Sandstone, black, and hard	169	957
Sand	43	50	Sandstone, pink, with streaks of clay	63	1,020
Clay	40	90	Gravel and sand	91	1,111
Sand and gravel	25	115	Basement complex	1	1,112
Clay	269	384			
Basalt	58	442			
Clay	243	685			
Clay, red, and boulders	103	788			

11N/4W-19G1 S. Drilled by Scoggin Drilling Co. in 1951. 16-inch casing 0-500 feet. Altitude about 2,045 feet.

Sand and gravel	65	65	Shale and boulders	30	215
Sand	40	105	Gravel and boulders	283	498
Shale and boulders	9	114	Shale	11	509
Gravel and boulders	71	185			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

11N/4W-19L1 S. Drilled by Scoggin Drilling Co. in 1951. 8-inch casing 0-350 feet; perforated 170-350 feet. Altitude about 2,055 feet.

Topsoil----------	20	20	Shale----------	105	170
Gravel and boulders---------	45	65	Gravel----------	180	350

11N/4W-23C1 S. Drilled by R.L. Triplett in 1952. Altitude about 2,020 feet.

Sand and clay-----	487	487	Basement complex (gneiss)---------	160	830
Basalt (Black Mountain Basalt?)	183	670			

11N/4W-27A1 S. Drilled by R. L. Triplett in 1952. 7-inch casing. Altitude about 2,020 feet.

Clay, red and green----------	125	125	Clay, silty and brown----------	49	377
Clay, with streaks of sand----------	162	287	Boulders----------	3	380
Sand and clay-----	41	328	Clay, brown-------	30	410
			Basement complex, green schist-----	46	456

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

11N/4W-32A1 S. Drilled by Evans Bros. Drilling Co. in 1967. 14-inch casing; perforated 158-425 feet. Altitude about 2,050 feet.

Sand, fine to medium----------	15	15	Sand, medium to coarse, with gravel and a little clay------	25	360
Sand, fine to medium, and clay-	11	26	Sand, coarse, with small gravel and a little clay----	40	400
Sand, with a little clay------	87	113	Sand, coarse, and brown clay-------	10	410
Clay, brown and blue----------	22	135	Clay, brown and sand----------	10	420
Sand, fine, and brown clay-------	37	172	Clay, with a small quantity of sand-	5	425
Sand, medium to coarse, and gravel----------	118	290			
Sand and gravel---	45	335			

11S/4W-32D2 S. Drilled by Scoggin Drilling Co. in 1951. 16-inch casing; perforated 175-460 feet. Altitude about 2,060 feet.

Topsoil----------	15	15	Gravel and boulders---------	15	250
Gravel and boulders---------	30	45	Shale----------	25	275
Shale----------	135	180	Gravel and boulders---------	165	440
Gravel and boulders---------	15	195	Shale----------	20	460
Shale----------	40	235			

11N/4W-32L1 S. 12-inch casing; perforated 193-268 feet. Altitude about 2,090 feet.

Sand and gravel---	48	48	Gravel, with streaks of clay--	73	195
Clay, blue--------	72	120	Gravel----------	77	272
Clay, red---------	2	122			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

11N/5W-24F1 S. Drilled by Evans Bros. Drilling Co. in 1967. 14-inch casing; perforated 155-367 feet. Altitude about 2,070 feet.

Sand, medium with small quantity of clay----------	45	45	Sand, fine to coarse, and clay-	34	191
Sand, and hard brown clay-------	10	55	Sand, fine to medium, and brown clay----------	98	289
Clay, blue and brown----------	41	96	Sand, medium to coarse, and brown clay----------	8	297
Clay, brown, and sand----------	14	110	Sand, hard--------	5	302
Clay, brown and blue----------	15	125	Sand, medium to coarse----------	50	352
Clay and sand-----	17	142	Boulders and sand-	15	367
Sand, fine to medium, and clay-	15	157			

11N/5W-24P1 S. Drilled by Scoggin Drilling Co. in 1950. 16-inch casing; perforated 160-430 feet. Altitude about 2,100 feet.

Topsoil----------	15	15	Shale, brown------	22	136
Shale, brown, with sand and boulders	50	65	Gravel and brown shale----------	44	180
Gravel----------	15	80	Gravel----------	250	430
Shale, brown and swelling, interbedded with gravel----------	34	114			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

11N/5W-24Q1 S. Drilled by Scoggin Drilling Co. in 1950. 16-inch casing; perforated 190-536 feet. Altitude about 2,090 feet.

Topsoil----------	10	10	Gravel----------	44	342
Gravel, sandy-----	36	46	Shale, hard-------	22	364
Sand--------------	10	56	Gravel and shale--	69	433
Shale-------------	118	174	Boulders and shale	89	522
Gravel and boulders, hard---	124	298	Boulders and gravel, hard-----	14	536

11N/6W-17L1 S. Drilled by J. R. Beylik in 1950. 20-inch casing 0-20 feet and 10-inch casing 0-618 feet; perforated 298-618 feet. Altitude about 2,560 feet.

Clay, sandy and brown, and hard gravel----------	20	20	Clay and boulders, hard----------	15	405
Boulders and sandy clay, hard---------	14	34	Sand, gravel, and gray clay, soft--	25	430
Clay, sandy and brown, with gravel, soft-----	126	160	Sand, gravel, and blue-gray clay, medium hard------	18	448
Clay, sandy and brown, medium hard----------	48	208	Gravel and clay, blue-gray and soft----------	92	540
Clay, sandy and brown, with gravel, hard-----	37	245	Clay, red, soft and hard layers--	55	595
Sand, gravel, and brown clay, soft-	90	335	Shale and conglomerate, very hard, bottom 6 feet well-cemented----------	23	618
Clay, sandy, with thin soft layers of gravel--------	55	390			

11N/6W-17P1 S. Drilled by J. R. Beylik in 1950. 24-inch casing 0-27 feet and 10-inch casing 0-597 feet; perforated 294-597 feet. Altitude about 2,570 feet.

	Thickness (feet)	Depth (feet)
Clay, sandy and brown, medium hard	60	60
Clay, sandy and gravel, medium hard	43	103
Clay, sandy and brown, medium hard	103	206
Clay and fine sand, medium hard	48	254
Gravel, fine sand, and clay, medium hard	51	305
Clay, sandy and brown, hard	70	375
Boulders, sand, and clay, hard	48	423
Sand, gravel and boulders, hard and cemented	6	429
Shale, conglomerate, and boulders, hard	29	458
Sand, gravel, clay, and shale, hard	26	484
Shale and sandy clay, hard	23	507
Shale, sandy clay and gravel, medium hard	62	569
Shale, conglomerate with boulders, very hard	28	597

11N/6W-17P2 S. Drilled by Scott Drilling Co. in 1953. 10-inch casing.

	Thickness (feet)	Depth (feet)
Sand, medium to coarse, and brown clay	90	90
Clay, brown, sand and gravel	20	110
Clay, brown and sand	23	133
Sand, brown clay, and gravel	147	280
Clay, brown and sandy	20	300
Sand and green clay	10	310
Clay, green and sandy	68	378
Sand and gravel some green clay	22	400
Clay, blue and sandy, and boulders	30	430
Gravel, sand and clay, very hard	17	447
Sandstone and green clay, some boulders	128	575
Clay, brown and sandy, some boulders	18	593
Sandstone and boulders, very hard	12	605
Shale, green	5	610
Sandstone, brown clay and boulders, hard	37	647

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

11N/6W-20A1 S. Drilled by J. R. Beylik in 1950. 24-inch casing 0-26 feet and uncased hole 26-712 feet. Altitude about 2,535 feet.

Clay, sandy and hard----------	120	120	Sand fine, gravel and brown clay, hard----------	83	418
Clay, yellow and hard----------	10	130	Clay, hard and brown, and sand--	42	460
Clay, sandy and yellow, hard-----	10	140	Clay, brown and white, hard------	36	496
Sand, yellow and soft----------	10	150	Clay, sand, and gravel, medium hard----------	16	512
Clay, sandy, hard-	34	184	Clay, brown, medium hard------	40	552
Sand, coarse, and soft clay--------	26	210	Clay, brown, sand and gravel, hard-	8	560
Clay, brown, and hard gravel------	40	250	Sandstone, cemented, hard---	10	570
Boulders, clay, and gravel, hard-	4	254	Clay, brown, sand and gravel, hard-	20	590
Clay, brown, and gravel, hard-----	61	315	Clay, brown, hard-	105	695
Gravel, fine sand, and clay---------	4	319	Gravel and clay, cemented and hard	17	712
Gravel, and brown sandy clay, hard-	16	335			

11N/6W-20Z1 S. Drilled by H. A. Briggs before 1919. Altitude about 2,535 feet.

"Granite formation," loose	60	60	Granite and quartz, some sand--------	12	180
Granite, gray and quartz----------	1	61	Clay with "lime deposits"--------	100	280
Boulders, very hard----------	11	72	Gravel----------	10	290
Granite, gray and boulders---------	6	78	Clay----------	3	293
Granite and cement, decomposed-------	90	168	Sand and boulders-	7	300
			Clay and broken quartz----------	8	308

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
11N/6W-22E1 S. Drilled in 1958. Altitude about 2,540 feet.					
Sand, silt, and pebbles	480	480	Shale, siltstone, and sandstone	111	796
Sandstone with scattered pebbles and thin layers of shale below 498 feet	20	500	Shale, gray to green, and siltstone	59	855
Shale, gray, siltstone, and sandstone	185	685	Shale, green, siltstone, and sandstone	59	914
11N/6W-24R1 S. Drilled in 1958. Altitude about 2,430 feet.					
Sand, gray to brown with some pebbles				1,400	1,400
11N/6W-25E1 S. Drilled in 1958. Altitude about 2,425 feet.					
Sand, brown, with pebbles about 390 feet	560	560	Conglomerate, brown-black, some green and purple shale	22	740
Sand, fine and brown, and green shale	115	675	Shale, sandy, green to gray	60	800
Conglomerate with green-gray clay pebbles	40	715	Sandstone with shale and basalt pebbles	3	803
Shale, green to brown, sticky	3	718	Sandstone with basalt and hard shale	53	856

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

11N/6W-26E1 S. Drilled in 1958. Altitude about 2,460 feet.

Sand with some pebbles----------	95	95	Sandstone with some pebbles-----	73	1,668
Sand, pebbles and boulders---------	1,495	1,590	Sandstone green-gray----------	35	1,703
Shale, green-gray-	5	1,595	Sand and boulders, hard----------	52	1,755

11N/6W-30A2 S. Drilled in 1957. Altitude is 2,498 feet. For detailed log see U.S.G.S. Bull. 1045-F, p. 371.

Sand with some pebbles, silt and clay----------	806	806	Sand, silt, and clay----------	16	1,825
Sand and clay with some siltstone and standstone beds----------	474	1,280	Sandstone, siltstone, claystone, conglomerate, and breccia, with a small quantity of limestone--------	1,675	3,500
Siltstone, sandstone, and claystone--------	40	1,320			
Clay, sand, and silt----------	67	1,387			
Sandstone, siltstone, and claystone, well-indurated--------	422	1,809			

11N/6W-30R3 S. Drilled in 1957. Altitude is 2,462.4 feet. For detailed log see U.S.G.S. Bull. 1045-F, p. 386.

Sand, silt, and clay----------	700	700	Sandstone, siltstone, and clay, interbedded	629	1,604
Clay, silt, and sand----------	275	975			

[Results in milligrams per liter except for iron

State well number	Date of collection	Depth of well (feet)	Water temperature (°C)	Results in milligrams per liter							
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)
30S/41E-21P01 M	11-02-69	677	--	--	--	76	31	84	.8	192	0
30S/41E-36G01 M	02-17-53	--	22	13	--	23	5.6	100	3.0	151	10
30S/41E-36G01 M	05-07-56	--	--	--	--	31	4.0	96	1.5	171	0
30S/42E-12F01 M	04-09-56	--	--	--	--	40	9.0	147	8.0	165	0
30S/42E-18R01 M	10-06-17	160	--	66	1400	171	31	401	--	138	0
30S/42E-18R01 M	03-05-57	--	22	--	--	174	28	415	12	122	0
30S/42E-20J01 M	02-11-54	--	--	--	--	567	13	818	18	95	0
30S/42E-20K01 M	04-29-53	--	21	50	--	464	85	866	15	88	0
30S/42E-22A01 M	10-06-17	60	--	85	50	69	12	336	--	188	0
30S/42E-24L01 M	08-19-53	--	23	73	--	12	.6	128	12	157	15
30S/42E-24L01 M	04-10-56	--	--	--	--	24	2.0	149	8.0	168	0
30S/42E-24L01 M	07-27-60	--	--	55	--	70	5.0	69	16	141	2
30S/43E-02D01 M	10-05-17	--	--	66	140	33	8.1	72	--	154	3
30S/43E-02D01 M	08-19-53	--	26	22	--	49	5.6	78	2.0	261	0
30S/43E-32N01 M	02-24-57	--	--	--	--	--	--	--	--	--	--
30S/43E-32N01 M	07-25-61	--	--	68	--	34	2.0	80	7.0	137	12
30S/44E-35E01 M	07-27-60	--	--	17	--	35	9.0	78	4.3	138	0
30S/45E-05E01 M	09-22-17	--	--	46	330	21	3.3	117	--	138	0
31S/41E-31N01 M	02-17-53	--	22	17	--	30	5.2	134	6.5	128	0
31S/42E-23L01 M	05-07-56	--	--	--	--	--	--	--	--	190	0
31S/45E-24Q01 M	07-26-61	--	22	21	--	31	5.0	129	2.0	177	0
31S/46E-02M01 M	10-07-53	--	--	--	--	3.0	4.0	145	14	251	0
31S/46E-16J01 M	12-15-53	--	--	--	--	141	52	300	13	120	0
31S/46E-16J01 M	07-27-60	--	23	34	--	127	58	283	1.0	293	0
31S/46E-21M01 M	08-21-16	--	--	30	--	22	8.3	77	--	197	0
31S/47E-05R01 M	03-04-53	--	--	--	--	38	5.0	95	2.1	124	0
32S/41E-15J01 M	03-01-53	--	--	31	--	35	8.0	162	2.0	210	0
32S/43E-28K01 M	06-17-53	--	24	--	--	36	9.0	210	4.5	134	0
32S/43E-28K01 M	01-11-54	--	--	--	--	41	7.0	188	4.8	122	0
32S/43E-28K01 M	04-14-55	--	--	--	--	40	6.0	180	3.8	117	2
32S/43E-28K01 M	07-25-61	--	26	24	--	34	7.0	201	5.1	70	0
32S/47E-20R01 M	02-12-53	--	--	--	--	64	41	210	7.8	268	0
32S/47E-21P01 M	10-12-17	88	--	100	130	94	31	175	--	520	15
32S/47E-34D01 M	10-12-17	41	--	50	860	48	49	140	--	270	0
11N/03W-20N01 S	08-17-16	--	--	26	500	42	6.9	57	--	197	0
11N/03W-28R02 S	05-22-68	--	--	--	--	18	2.9	81	1.4	180	0
11N/03W-30A01 S	03-16-32	--	--	--	--	3.4	7.5	158	45	320	0
11N/03W-30A01 S	02-06-52	45	18	36	.00	1.7	.5	143	1.4	219	39
11N/03W-33H01 S	06-26-53	--	22	--	--	23	4.5	85	1.3	190	0
11N/04W-04J01 S	07-02-60	--	--	48	--	50	13	380	6.2	155	0
11N/04W-19E01 S	03-10-52	--	--	32	--	70	17	325	--	189	0
11N/04W-19H01 S	06-10-53	210	--	--	--	158	25	625	13	166	0
11N/04W-20E01 S	03-26-55	270	--	--	--	142	20	570	10	161	0
11N/04W-28N01 S	02-06-57	--	--	--	--	147	22	430	5.4	134	0
11N/04W-28N01 S	05-29-68	--	--	--	--	40	7.0	232	5.3	--	--
11N/04W-30E01 S	06-26-52	--	--	26	--	88	10	232	--	195	0
11N/04W-30N01 S	04-23-52	--	--	34	--	49	22	299	--	214	0
11N/04W-30N01 S	06-10-52	--	--	22	--	40	4.0	230	--	165	0
11N/04W-30N02 S	06-12-53	--	23	--	--	66	12	290	5.8	220	0
11N/04W-30N02 S	04-14-61	--	--	53	--	46	8.0	245	5.5	164	0
11N/04W-31H01 S	02-06-52	--	--	78	.00	46	7.4	260	--	173	0
11N/04W-32L01 S	06-12-53	--	--	--	--	36	10	180	4.6	166	0
11N/04W-32L01 S	08-05-54	--	--	--	--	39	5.0	185	4.0	154	0
11N/04W-33G01 S	06-23-53	--	25	--	--	40	5.0	290	5.9	141	0
11N/04W-33G01 S	07-25-61	--	26	60	--	26	2.0	246	4.7	211	0
11N/05W-24G01 S	06-12-53	--	23	--	--	18	4.0	290	3.8	237	0
11N/05W-24G01 S	05-29-68	--	21	--	--	35	5.0	390	4.9	208	0
11N/05W-24P01 S	03-10-52	--	--	30	--	51	9.0	334	--	131	11
11N/05W-24P01 S	06-10-52	--	--	30	--	52	9.0	217	--	201	0
11N/05W-24Q01 S	06-10-52	--	--	29	--	59	12	248	--	189	0
11N/05W-24R01 S	06-10-52	--	--	27	--	43	10	275	--	201	0
11N/05W-24R02 S	02-06-52	262	--	76	20	88	13	176	--	173	0
11N/06W-17L01 S	- -50	--	--	22	450	27	6.8	269	--	340	0
11N/06W-20A01 S	- -50	--	--	19	--	19	10	259	--	219	0

and boron which are in micrograms per liter]

Results in milligrams per liter--Continued											
Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Sum of determined constituents	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Specific conductance (micromhos at 25°C)	pH
240	69	.7	.0	270	--	670	--	318	36	998	7.7
64	61	--	--	500	--	381	--	--	72	548	8.4
69	60	.5	18	.00	--	375	--	--	69	665	8.2
68	177	.2	3.3	600	--	556	--	--	68	1020	8.0
35	888	--	7.8	--	--	1720	--	--	61	--	--
20	966	.5	11	1650	--	2130	--	--	62	3520	7.6
37	2220	.2	.0	1950	--	4420	--	--	54	3730	7.6
56	2310	.8	5.0	1500	--	--	--	--	55	6880	8.0
74	500	--	3.5	--	--	1190	222	--	77	--	--
20	104	.8	.3	.00	--	--	--	--	85	673	8.6
94	108	.9	18	650	--	547	--	--	81	856	7.8
101	105	.8	2.7	780	--	566	174	55	41	840	8.4
56	58	--	.9	--	--	416	116	--	58	--	--
17	61	.8	.3	.00	--	--	--	--	53	631	7.9
--	59	--	--	--	--	471	78	--	--	--	--
59	50	.8	20	270	--	393	95	0	63	559	8.3
76	71	.4	.0	780	--	416	122	9	57	645	8.2
97	58	--	3.2	--	--	421	66	--	79	--	--
154	76	--	27	600	--	509	--	--	74	806	8.0
--	89	--	--	--	--	--	40	--	--	714	7.9
89	96	2.9	16	460	--	451	100	0	74	785	8.0
7.0	84	7.0	1.0	700	--	385	--	--	88	703	7.8
156	672	2.0	13	860	--	1720	--	--	53	2520	7.2
145	553	1.5	3.0	400	--	1400	551	311	53	2260	7.2
42	28	--	14	--	--	334	89	--	65	--	--
121	75	4.0	1.0	480	404	418	115	--	64	603	7.6
138	95	1.0	9.7	1400	--	--	--	--	74	992	7.7
296	99	4.5	4.5	2100	--	725	--	--	78	1130	8.0
301	99	2.6	2.4	680	--	745	--	--	75	1040	7.8
293	92	2.6	4.5	1940	--	723	126	--	75	1140	8.0
331	106	1.1	5.6	1730	--	763	115	58	78	1200	8.0
219	246	2.0	6.4	880	931	914	329	--	57	1400	8.1
54	195	--	--	--	--	882	--	--	51	--	--
167	162	--	1.2	--	--	757	321	--	49	--	--
54	28	--	.0	--	--	329	133	--	48	--	--
41	31	1.5	.1	300	--	298	57	--	75	501	8.3
111	44	--	.6	4780	--	--	--	--	78	675	9.2
37	32	1.6	4.0	3380	--	426	173	--	97	660	9.2
40	40	3.0	5.0	320	--	316	--	--	70	490	8.1
228	457	1.4	2.6	2600	--	1250	182	54	82	2080	8.2
215	408	--	--	--	--	--	--	--	74	1830	--
241	1060	.5	14	980	--	2310	--	--	73	2380	7.4
260	950	1.0	12	1260	--	2180	437	305	73	3610	7.6
261	750	1.6	3.5	1400	--	1990	455	345	67	2990	7.1
240	187	.9	6.2	1400	--	901	129	--	79	1420	8.3
208	277	--	--	--	--	--	--	--	66	1580	--
302	266	--	--	--	--	--	--	--	75	1680	--
230	165	--	--	--	--	--	--	--	81	1240	--
246	280	.8	11	1340	--	1080	--	--	74	1570	7.3
249	204	.6	3.1	1300	--	882	147	12	78	1340	7.6
240	235	.8	7.9	940	--	952	146	5	80	1500	7.8
155	151	1.0	9.4	600	--	688	--	--	74	983	7.6
187	142	.8	7.0	720	--	717	116	0	77	1040	7.8
207	275	1.2	11	960	--	905	--	--	83	1470	7.9
180	213	.8	11	320	--	804	75	0	87	1315	7.7
129	243	1.2	13	900	--	875	--	--	90	1282	7.7
207	404	1.2	16	--	--	1250	108	--	88	2160	8.2
231	373	--	--	--	--	--	--	--	82	1610	--
152	224	--	--	--	--	--	--	--	74	1280	--
198	266	--	--	--	--	--	--	--	73	1400	--
237	238	--	--	--	--	--	--	--	80	1510	--
162	248	.3	15	620	--	890	275	134	58	1400	7.5
138	184	.8	--	--	--	1020	95	--	86	1570	8.2
178	204	.0	--	35000	--	946	90	--	86	1455	7.8

TABLE 5.--*Pumping tests*

Time: Time of measurement, in minutes, after pump was started.

Static water level: The depth to water, in feet below or above (+) land-surface datum, prior to start of test.

Pumping water level: The depth to water, in feet below or above (+) land-surface datum, at end of test.

Drawdown: The difference, in feet, between the static and pumping water levels.

Yield: The yield of the well, in gallons per minute, for drawdown indicated.

Specific capacity: Yield, in gallons per minute, divided by drawdown, in feet. The specific capacity is a measure of the physical condition of the well and the aquifer or aquifers which it penetrates. A well with a large specific capacity is capable of a greater yield than a well with a small specific capacity.

State well number	Date	Time (minutes)	Static water level (feet)	Pumping water level (feet)	Drawdown (feet)	Yield (gpm)	Specific capacity (gpm/ft of dd)
30S/41E-12R01 M		360			15	400.0	26.67
30S/41E-21P01 M	11 02 69		358	510	152	75.0	0.49
30S/41E-36G01 M	02 17 53					12.0	
30S/42E-20J01 M	02 11 54					50.0	
30S/42E-20K01 M	04 29 53					70.0	
30S/42E-24L01 M	08 19 53		147.1			6.0	
30S/43E-02D01 M	08 19 53		17.8			5.0	
30S/43E-02D01 M	08 07 68					2.0	
30S/43E-02D02 M	08 07 68					5.0	
30S/43E-32N01 M	02 24 57		327		1.0	14.3	14.30
30S/43E-32N01 M	02 24 57		327		1.5	20.3	13.53
30S/43E-32N01 M	02 24 57	1440	327		2.4	30.2	12.58
30S/45E-05E01 M	08 08 68			+		0.1	
30S/45E-26Q01 M	05 17		175			6.0	
31S/45E-01Z01 M	02 17		125			180.0	
31S/45E-15J01 M	07 17		117	129	12	225.0	18.75
31S/45E-24Z01 M	03 17		122			180.0	
31S/45E-02M01 M	07 15		104			7.0	
31S/46E-05Z01 M	17		105		11	450.0	40.91
31S/46E-19M01 M	10 14		112	120	8	7.5	0.94
31S/46E-21M01 M	03 15		120.3			9.0	
32S/41E-15J01 M	10 15 52		203.1			10.0	
32S/43E-28K01 M	06 17 53			9.5		3.0	
32S/43E-28K01 M	04 14 55					0.5	
32S/43E-28K01 M	04 12 56					0.1	
32S/43E-28K01 M	12 21 56					0.1	
32S/43E-28K01 M	11 14 62					0.1	
32S/43E-28K01 M	01 17 64					0.1	
32S/43E-28K01 M	05 19 65					0.1	
32S/43E-28K01 M	12 08 65					0.1	

State well number	Date	Time (minutes)	Static water level (feet)	Pumping water level (feet)	Drawdown (feet)	Yield (gpm)	Specific capacity (gpm/ft of dd)
32S/43E-28K01 M	05 05 66					0.1	
32S/43E-28K01 M	11 17 66					0.4	
32S/43E-28K01 M	03 31 67					0.8	
32S/43E-28K01 M	12 07 67					0.4	
32S/43E-28K01 M	04 30 68					0.3	
32S/43E-28K01 M	07 24 68			10.0		1.0	
32S/43E-28K01 M	11 15 68					0.2	
32S/43E-28K01 M	04 11 69					0.2	
11N/03W-15D01 S	07 05 68					750.0	
11N/03W-28R02 S	05 22 68					15.0	
11N/03W-30A01 S	11 08 50					0.1	
11N/03W-30A01 S	02 06 52					9.0	
11N/03W-30A01 S	05 16 51					0.7	
11N/03W-30A01 S	11 27 51					0.7	
11N/03W-30A01 S	04 12 56					1.5	
11N/03W-30A01 S	12 21 56					0.5	
11N/03W-30A01 S	05 07 57					0.8	
11N/03W-30A02 S	06 25 53					0.5	
11N/03W-30A02 S	04 12 56					1.0	
11N/03W-30A02 S	12 21 56					0.1	
11N/03W-30A02 S	12 03 57					0.2	
11N/04W-19E01 S	51					1700.0	
11N/04W-19F01 S	51					1350.0	
11N/04W-19H01 S	06 10 53			108.5		63.0	
11N/04W-19K01 S	06 17 53					585.0	
11N/04W-19N01 S	10 22 52					1800.0	
11N/04W-19P01 S	06 10 53					450.0	
11N/04W-19Q01 S	06 10 53					450.0	
11N/04W-20E01 S	03 26 55			92		90.0	
11N/04W-28N01 S	05 29 68					1000.0	
11N/04W-29D01 S	06 10 53					675.0	
11N/04W-29N01 S	06 09 53					900.0	
11N/04W-30D01 S	51					1350.0	
11N/04W-30N03 S	19					450.0	
11N/04W-30R01 S	06 10 53					585.0	
11N/04W-32A01 S	09 25 67		135	166	31	1200.0	38.71
11N/04W-32A01 S	09 25 67			173	38	1400.0	36.84
11N/04W-32A01 S	09 25 67			180	45	1600.0	35.56
11N/04W-32A01 S	09 25 67			195	60	2000.0	33.33
11N/04W-32A01 S	09 25 67			209	74	2400.0	32.43
11N/04W-32A01 S	09 25 67			228	93	3000.0	32.26
11N/04W-32D01 S	06 09 53					1125.0	
11N/04W-32D02 S	06 09 53					1350.0	
11N/04W-33G01 S	06 23 53					500.0	
11N/05W-24A01 S	06 12 53					990.0	

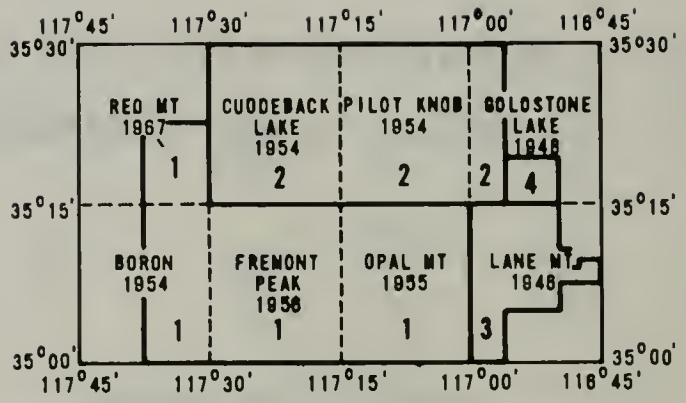
State well number	Date	Time (minutes)	Static water level (feet)	Pumping water level (feet)	Drawdown (feet)	Yield (gpm)	Specific capacity (gpm/ft of dd)
11N/05W-24A01 S	06 12 53					810.0	
11N/05W-24E01 S	06 11 53		160			450.0	
11N/05W-24F01 S	05 22 67		188	213	25	1000.0	40.00
11N/05W-24F01 S	05 22 67			220	32	1200.0	37.50
11N/05W-24F01 S	05 22 67			225	37	1400.0	37.84
11N/05W-24F01 S	05 22 67			232	44	1600.0	36.36
11N/05W-24F01 S	05 22 67			239	51	1800.0	35.29
11N/05W-24F01 S	05 22 67			245	57	2000.0	35.09
11N/05W-24F01 S	05 22 67			254	66	2200.0	33.33
11N/05W-24G01 S	06 12 53					720.0	
11N/05W-24H01 S	06 12 53					1170.0	
11N/05W-24P01 S	10 22 52					1800.0	
11N/05W-24Q01 S	10 22 52					1500.0	
11N/05W-24R01 S	10 22 52					1800.0	
11N/06W-17L01 S	12 50		288	558	270	48.0	0.18
11N/06W-17L01 S	12 50			450	172	25.8	0.15
11N/06W-17P01 S	11 50		273	490	217	8.0	0.04
11N/06W-17P02 S	07 13 53		262.0	475.0	213.0	24.0	0.11
11N/06W-20A01 S	09 50		252	712	460	16.8	0.04

MAPS OF THE HARPER, SUPERIOR, AND CUDDEBACK VALLEY AREAS SAN BERNARDINO COUNTY, CALIFORNIA

SHOWING GENERALIZED GEOLOGY AND LOCATION OF WELLS AND SPRINGS

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT

FEDERAL-STATE COOPERATIVE
GROUND-WATER INVESTIGATIONS
PREPARED BY U.S. GEOLOGICAL SURVEY
1970



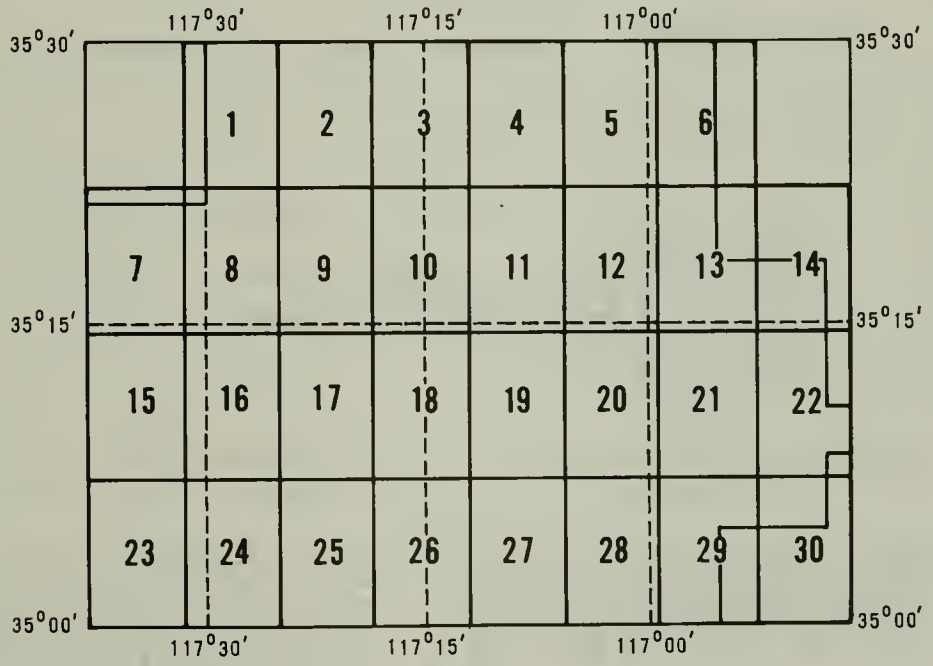
INDEX TO TOPOGRAPHIC MAPS AND GEOLOGIC MAPPING

Geology compiled and modified by W.R. Moyle, Jr., from published and unpublished mapping:

1. T.W. Dibblee, Jr. (1968 and unpublished)
2. G.I. Smith (unpublished)
3. T.H. McCulloh (unpublished)
4. W.R. Moyle, Jr. (unpublished)

Location of wells and springs by J.D. Horne and W.R. Moyle, Jr.
Geophysical traverses by W.R. Moyle, Jr.

This section consists of explanatory information and 30 page-size maps that show generalized geology and location of wells and springs in the Harper, Superior, and Cuddeback Valley areas. The area covered by each individual map is shown below. One 38 x 54-inch composite of these maps is available on request, at the requester's expense, from the district chief, U.S. Geological Survey, Water Resources Division, 855 Oak Grove Avenue, Menlo Park, California 94025.



Base from U.S. Geological Survey topographic quadrangles.
Scale 1:24,000 and 1:62,500

EXPLANATION

UNCONSOLIDATED DEPOSITS

Holocene

Qya — Younger alluvium

Sand, gravel, silt, and clay beneath alluvial plains; largely above the water table but where saturated yields water to wells

Qp — Playa deposits

Clay, silt, and sand beneath lakebeds; where saturated, yield small quantities of water to wells

Qs — Sand

Sand, actively drifting; above the regional water table

Pleistocene

Qoa — Older alluvium

Generally weathered, dissected sand, gravel, silt, and clay; yields water freely to wells

Qof — Older fan deposits

Moderately indurated gravel, boulders, and sand. Include the Pleistocene(?) Christmas Canyon Formation; where saturated, yield water to wells

Qol — Older lake deposits

Clay, silt, and sand

QUATERNARY

CONSOLIDATED ROCKS

Pleistocene

Qv — Basalt

Basalt flows, vesicular to dense; includes the Black Mountain Basalt; occurs above the regional water table

QUATERNARY

Tv — Volcanic rocks

Rhyolite, andesite, tuff, tuff breccia, basalt, obsidian, pumice, and perlite. Includes the volcanic rocks in the Barstow, Pickhandle, and Jackhammer Formations. Yield little water to wells

Tc — Continental sedimentary rocks

Sandstone, conglomerate, fanglomerate, breccia, limestone, chert, and water-laid tuff with some clay and shale. Includes the sedimentary parts of the Barstow, Jackhammer, Pickhandle, and Bedrock Spring Formations. Yield little water to wells and springs

TERTIARY

pTb — Basement complex

Consists of igneous and metamorphic rocks, undifferentiated. Yields small quantities of water from fractures and weathered zones

PRE-TERTIARY

MAP SYMBOLS

Geologic contact

Dashed where approximately located

U D

Fault

Dashed where approximately located, dotted where concealed, questioned where doubtful. U, upthrown side; D, downthrown side. Arrows indicate direction of lateral movement

Geophysical traverse

Ancient shoreline of Lake Harper

D1

Irrigation well

L1

Domestic, stock, or unused well

G2

Flowing well

N1

Dry or destroyed well

AS1

Flowing spring

ES1

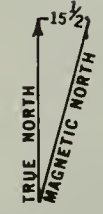
Dry spring

WELL-NUMBERING SYSTEM

Letter after well indicates position in section thus:

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

See text for complete description

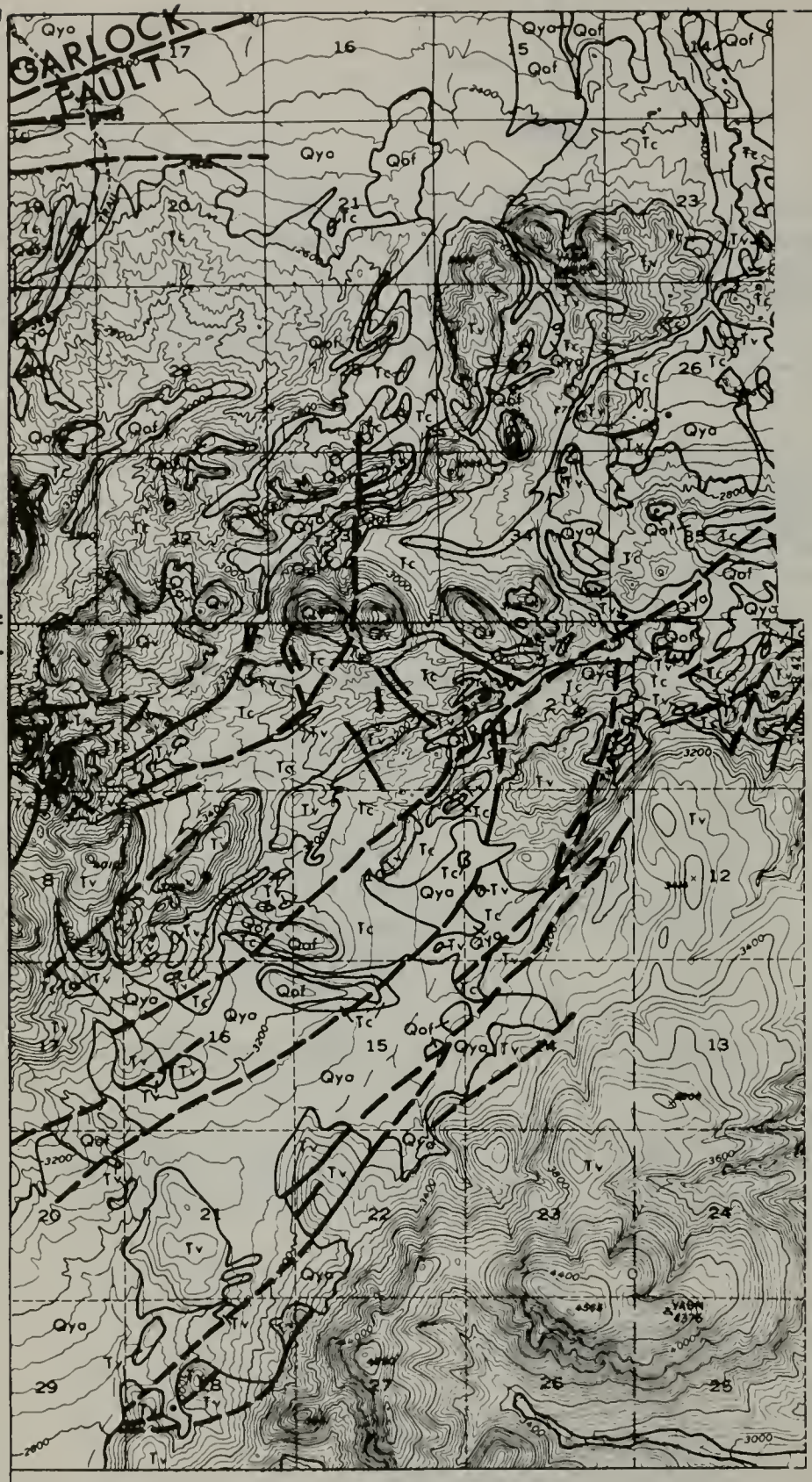


APPROXIMATE MEAN DECLINATION 1970

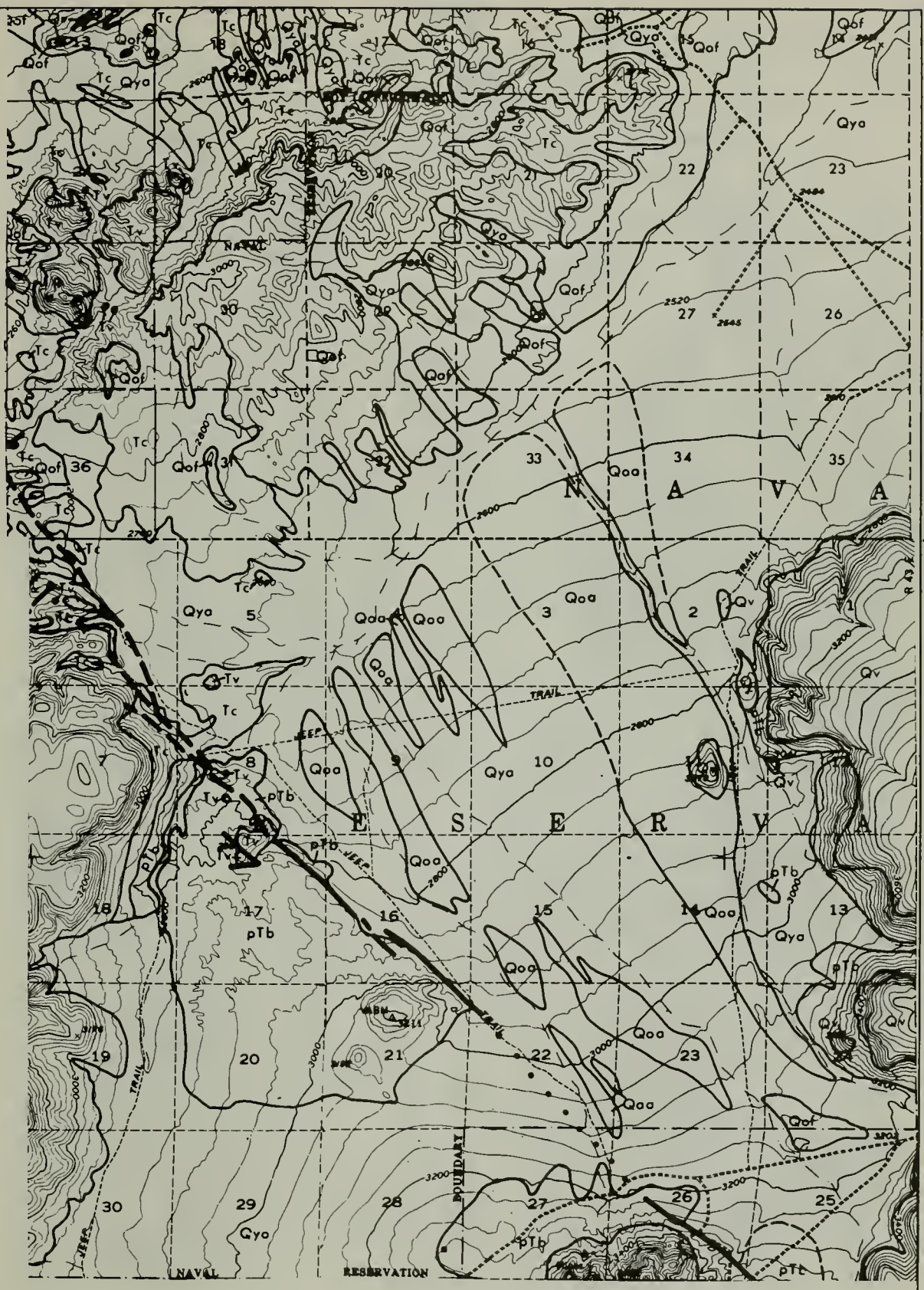
1 0 1 2 3 4 Miles

CONTOUR INTERVAL 40 AND 80 FEET
DATUM IS MEAN SEA LEVEL

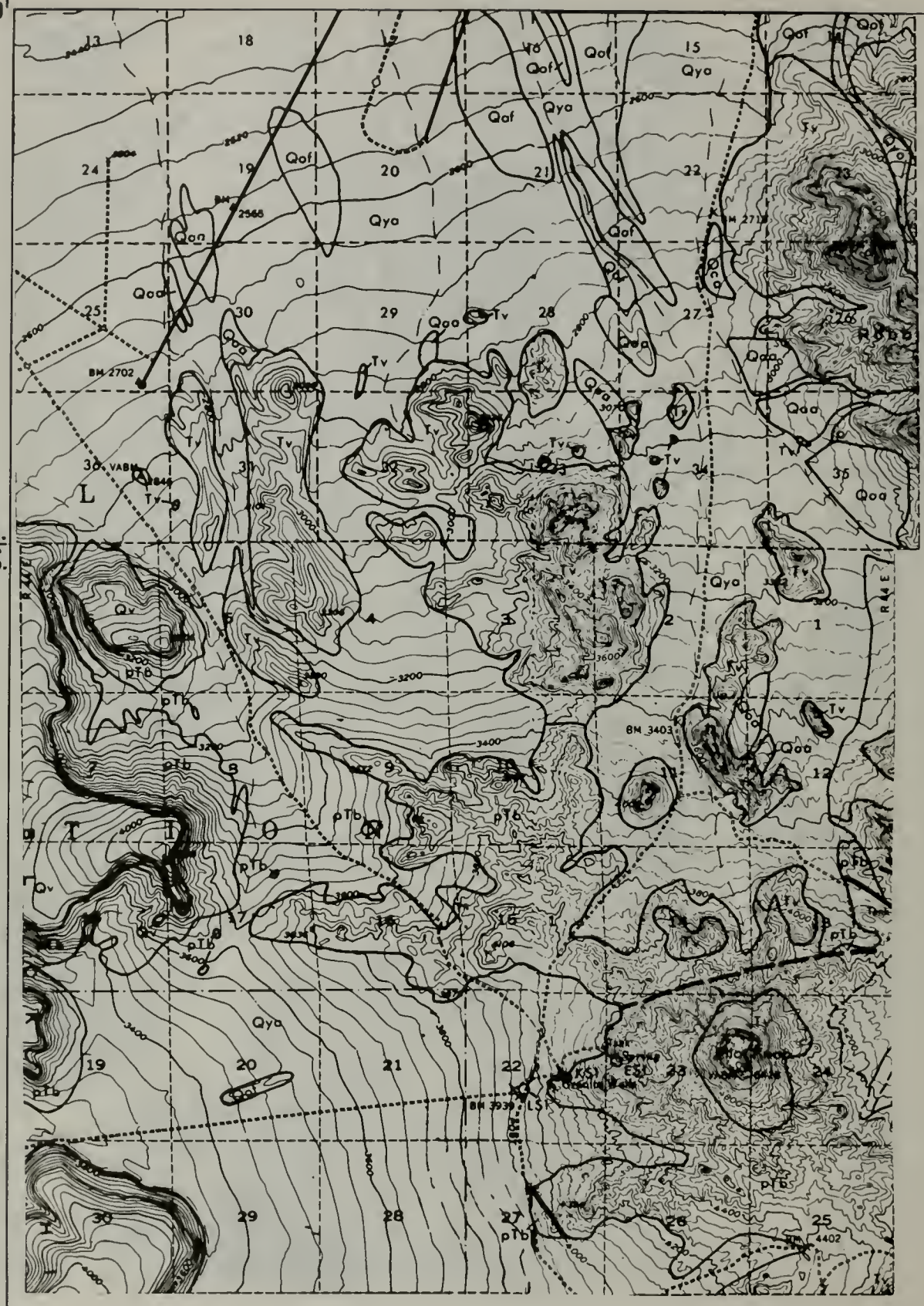
MAP 1



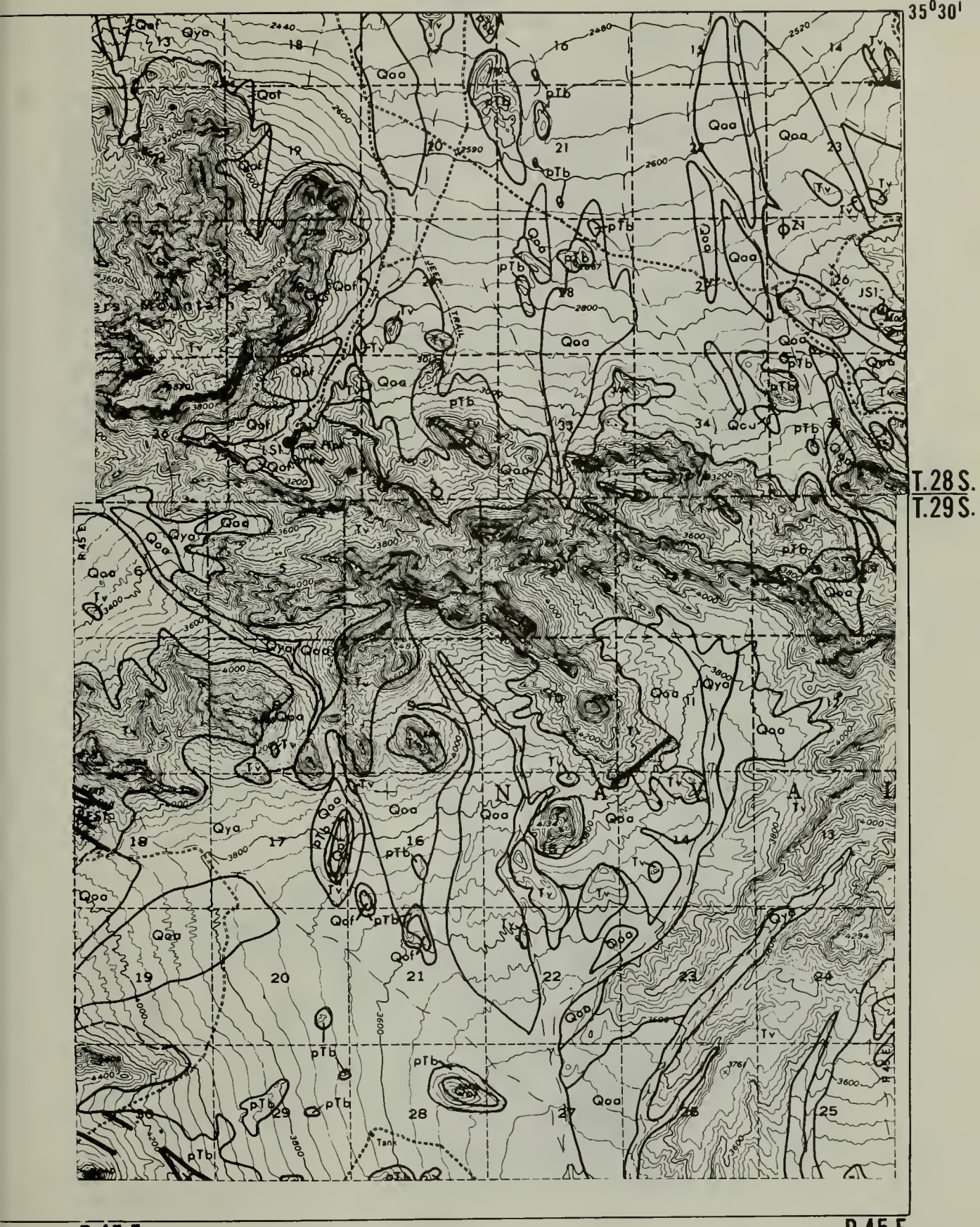
MAP 2


35°30'
T.28 S.
T.29 S.
R.43 E.
R.43 E.
N A V A
E S E R V A
Qoa
Qya
Qof
Qv
Tc
Tv
pTb
TRAIL
JEEP
BOUNDARY
NAVAL RESERVATION

MAP 3

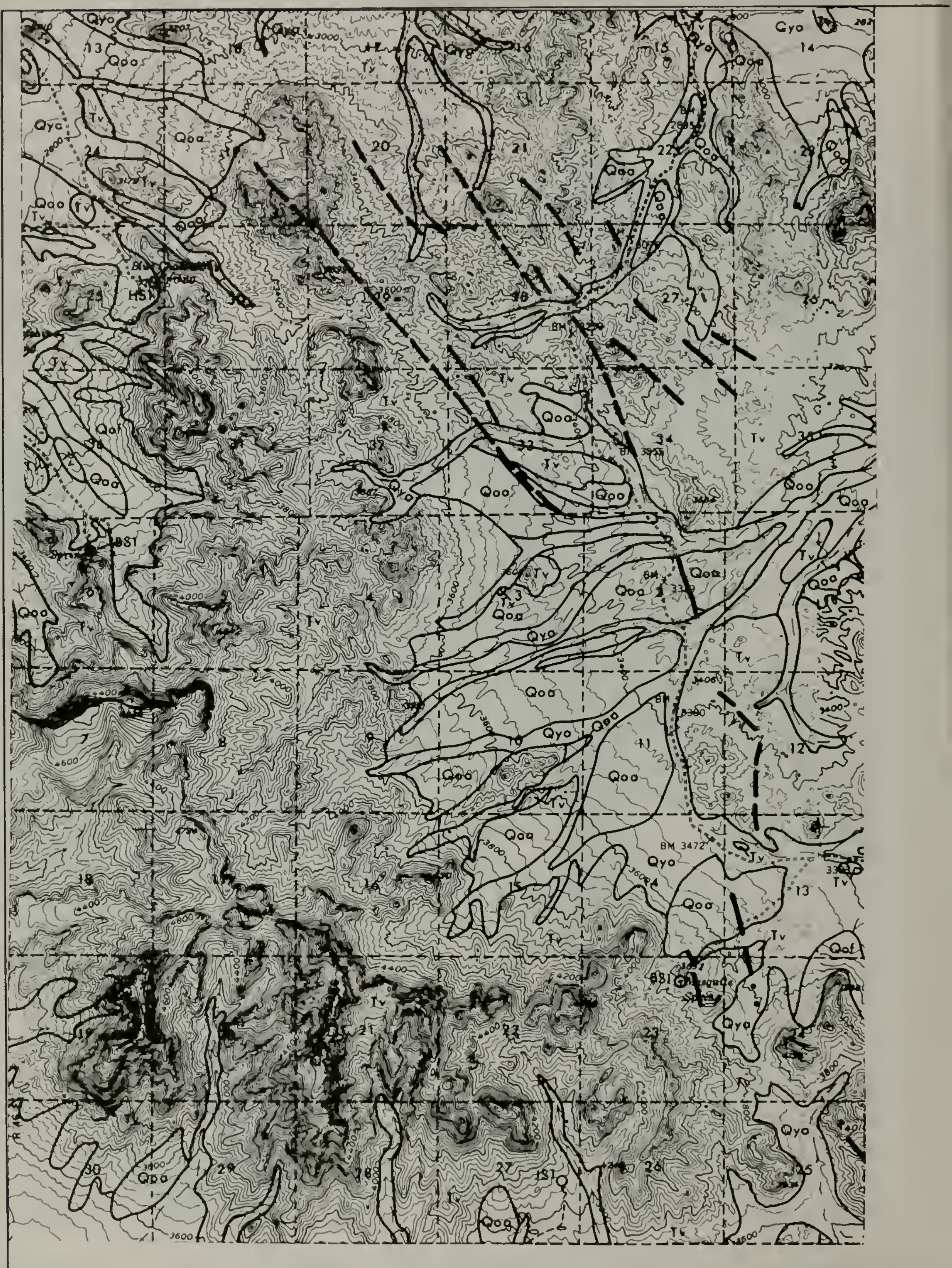

35°30'
T. 28 S.
T. 29 S.
R.44 E.
117°15'
R.44 E.
Qya
Qof
Qoa
Qoo
Tv
pTb
Qv
BM 2702
BM 3403
BM 3939
BM 4402
BM 2566
BM 2718
VABM 8446

MAP 4


35°30'
T.28 S.
T.29 S.
R.45 E.
R.45 E.
Qaf
Qya
Qaa
Tv
pTb
Qpa
Qcu
JSl
Tank
JEEP TRAIL

MAP 5

35°30′



T.28 S.

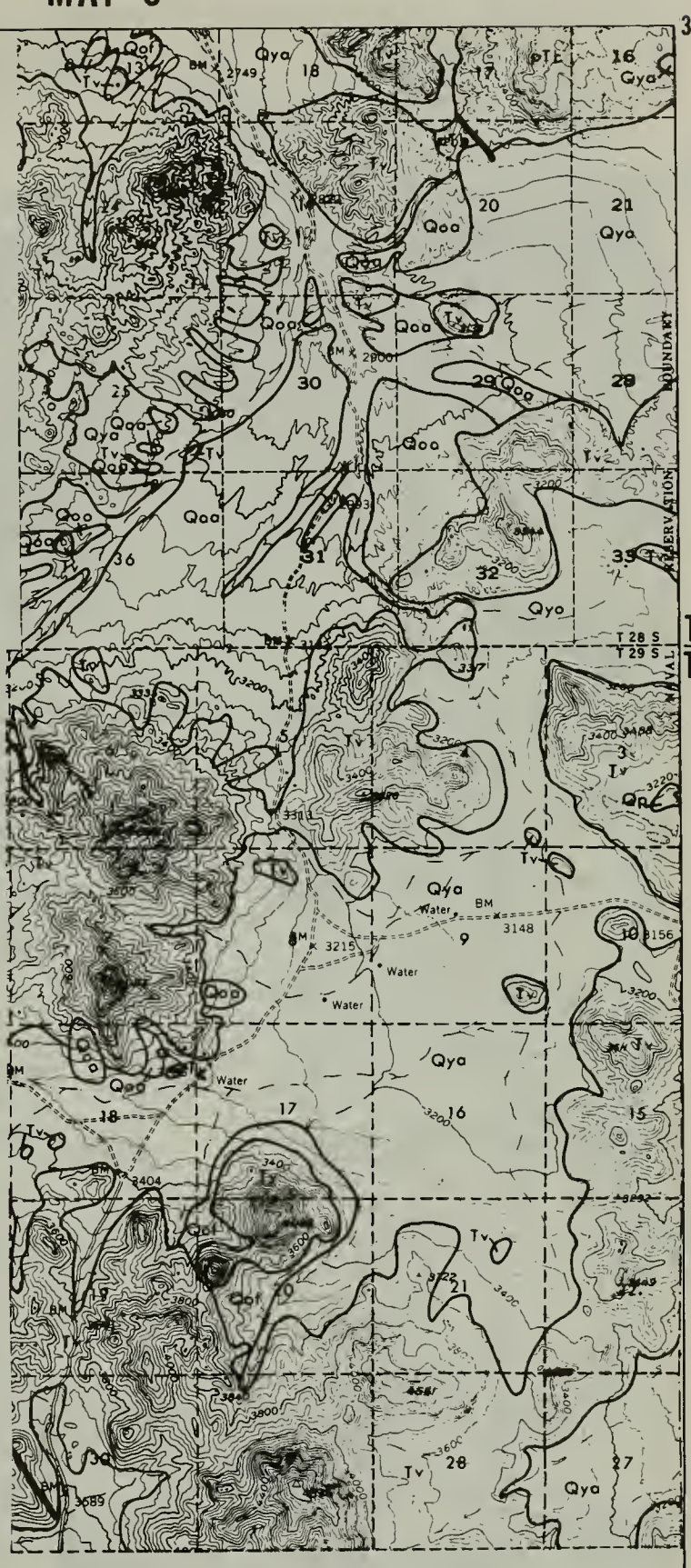
T.29 S.

R.46 E.

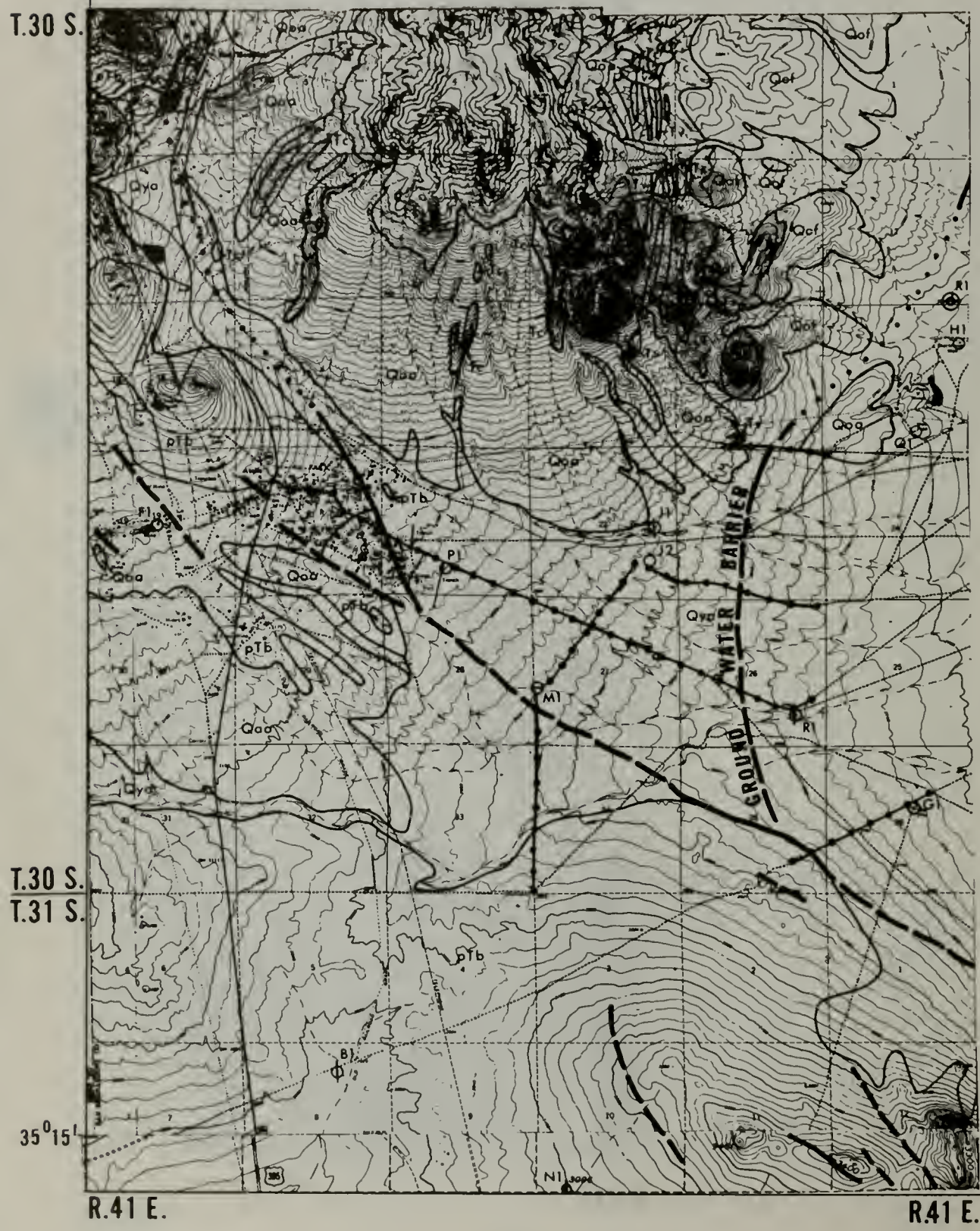
117°00′

R.46 E.

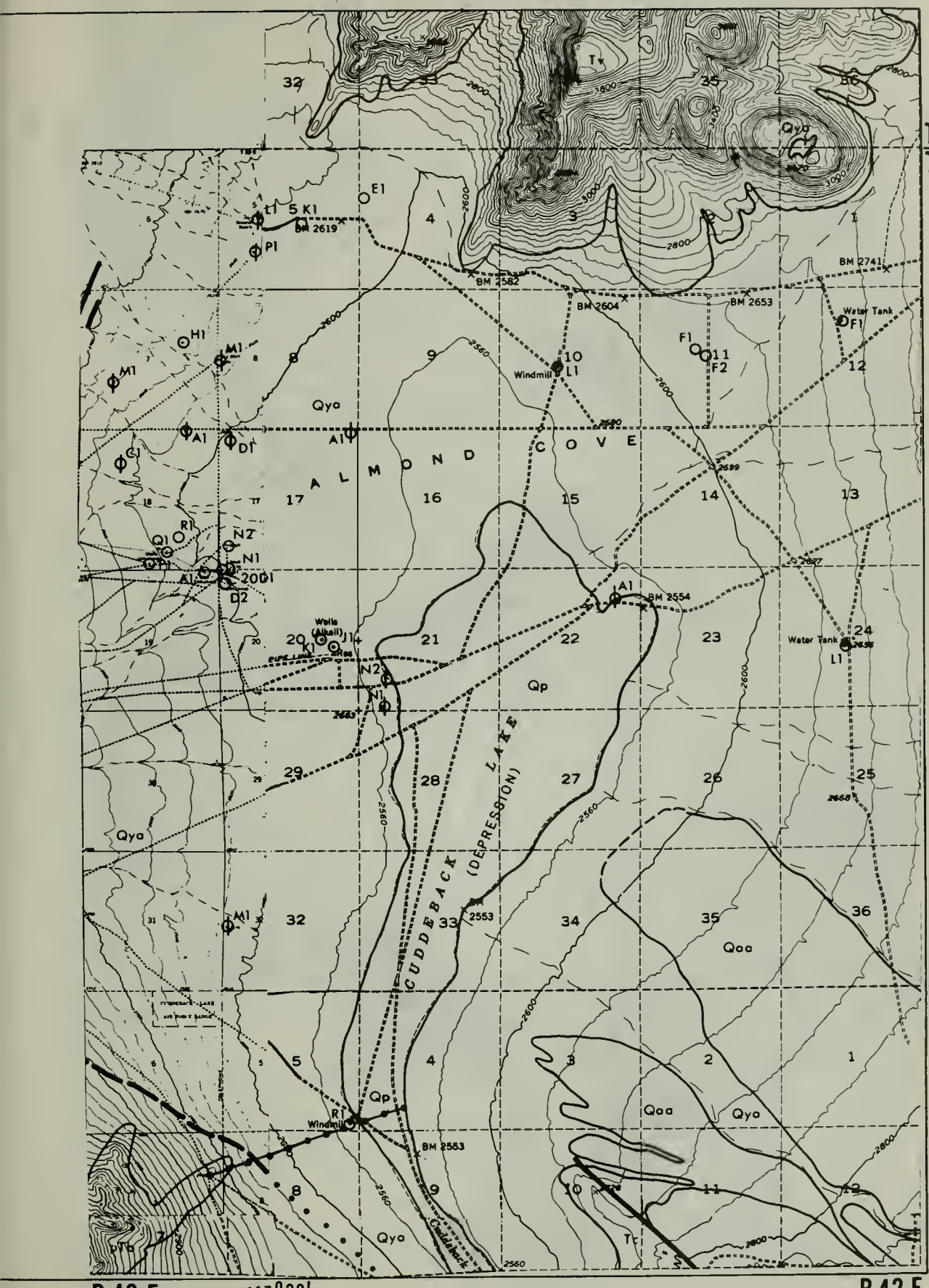
MAP 6


35°30'
T.28 S.
T.29 S.
R.47 E.
T 28 S
T 29 S
NAVAL OBSERVATION BOUNDARY
Qya
Qoo
Qof
Tv
Water
BM 3215
BM 3148
BM 3156
BM 3404
BM 3689
16
17
18
20
21
28
29
30
31
32
33
35
36
3
9
10
15
27

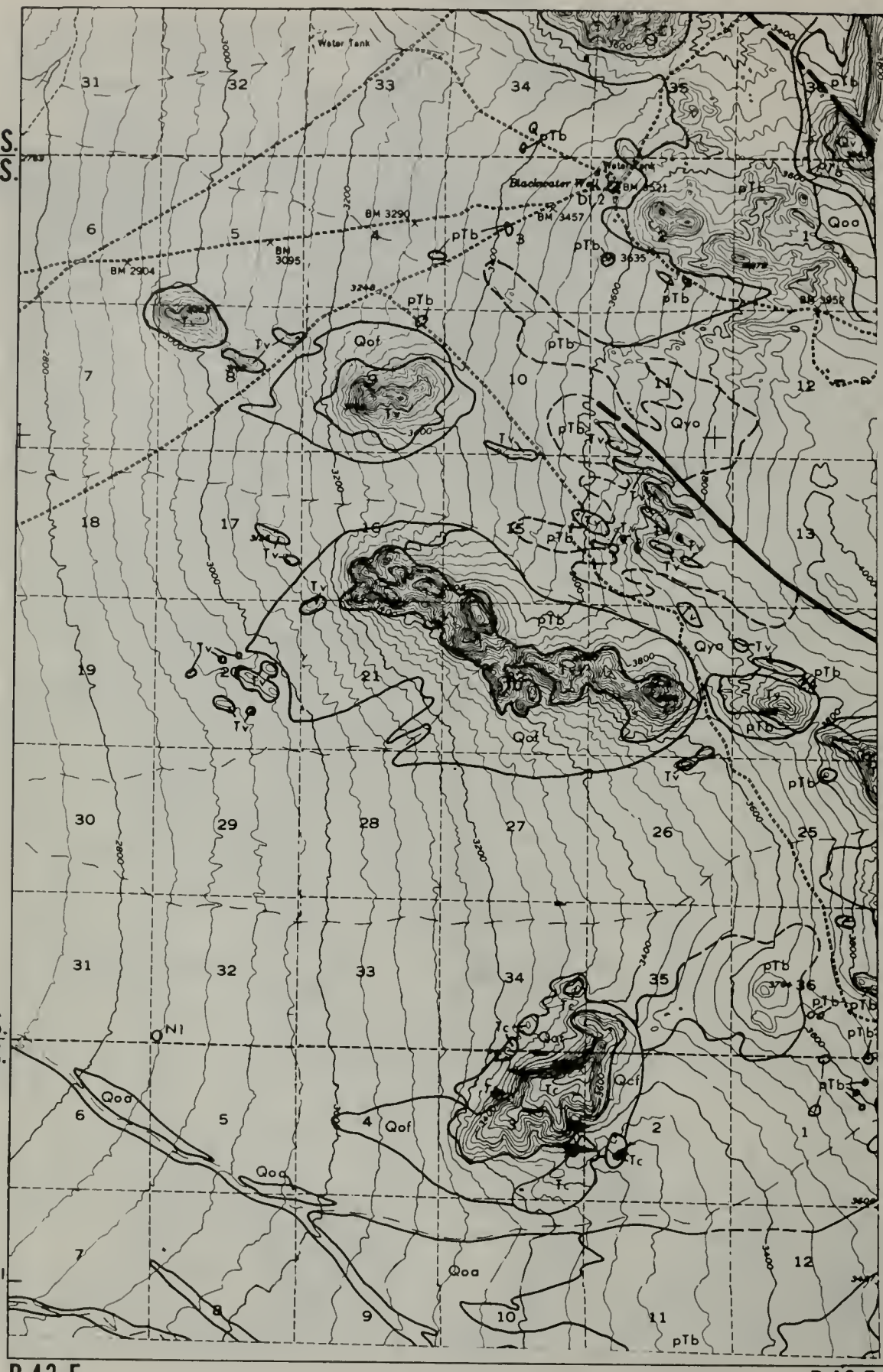
MAP 7


T.30 S.
T.31 S.
R.41 E.
R.41 E.
GROUND WATER BARRIER
Qaa
Qya
Qof
Qoa
Qoa
Tc
Qaa
Qoa
Qof
Qof
Qof
R1
H1
Qaa
Qoa
Qoa
Qoa
Qoa
Q1
Qya
Pl
Tb
Pl
Pl
Qaa
Qoa
Qya
pTb
M1
R1
Qaa
Qya
Q1
pTb
B1
N1
35°15'

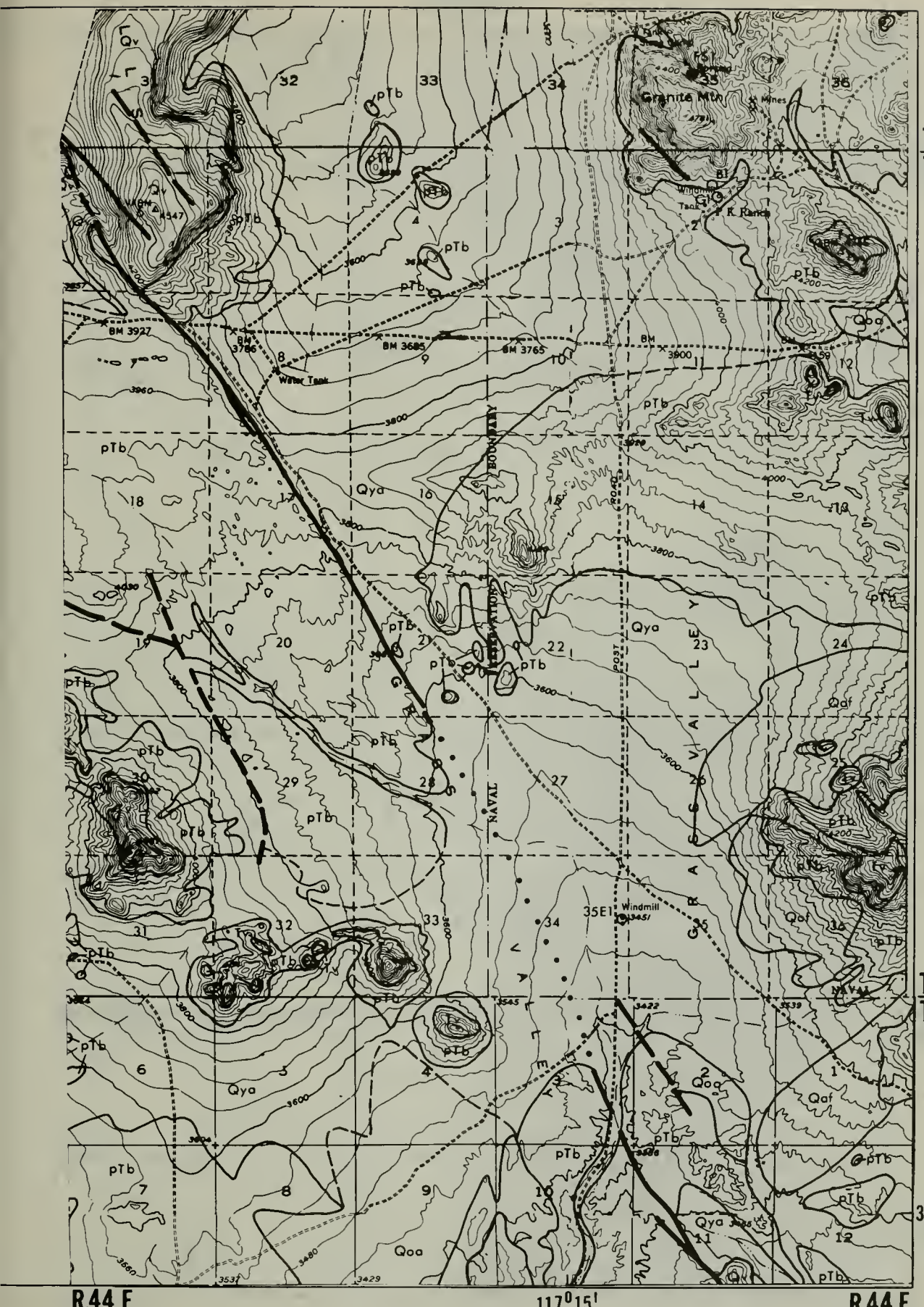
MAP 8


T. 29 S.
T. 30 S.
T. 30 S.
T. 31 S.
R. 42 E.
R. 42 E.
117°30'
35°15'
ALMOND COVE
CUDDEBACK (DEPRESSION) LAKE
Windmill
Water Tank
Wells (Alkali)
BM 2619
BM 2582
BM 2604
BM 2653
BM 2741
BM 2554
BM 2553
Qya
Qp
Qoa
Tv
Tc
Ptb
Cuddeback

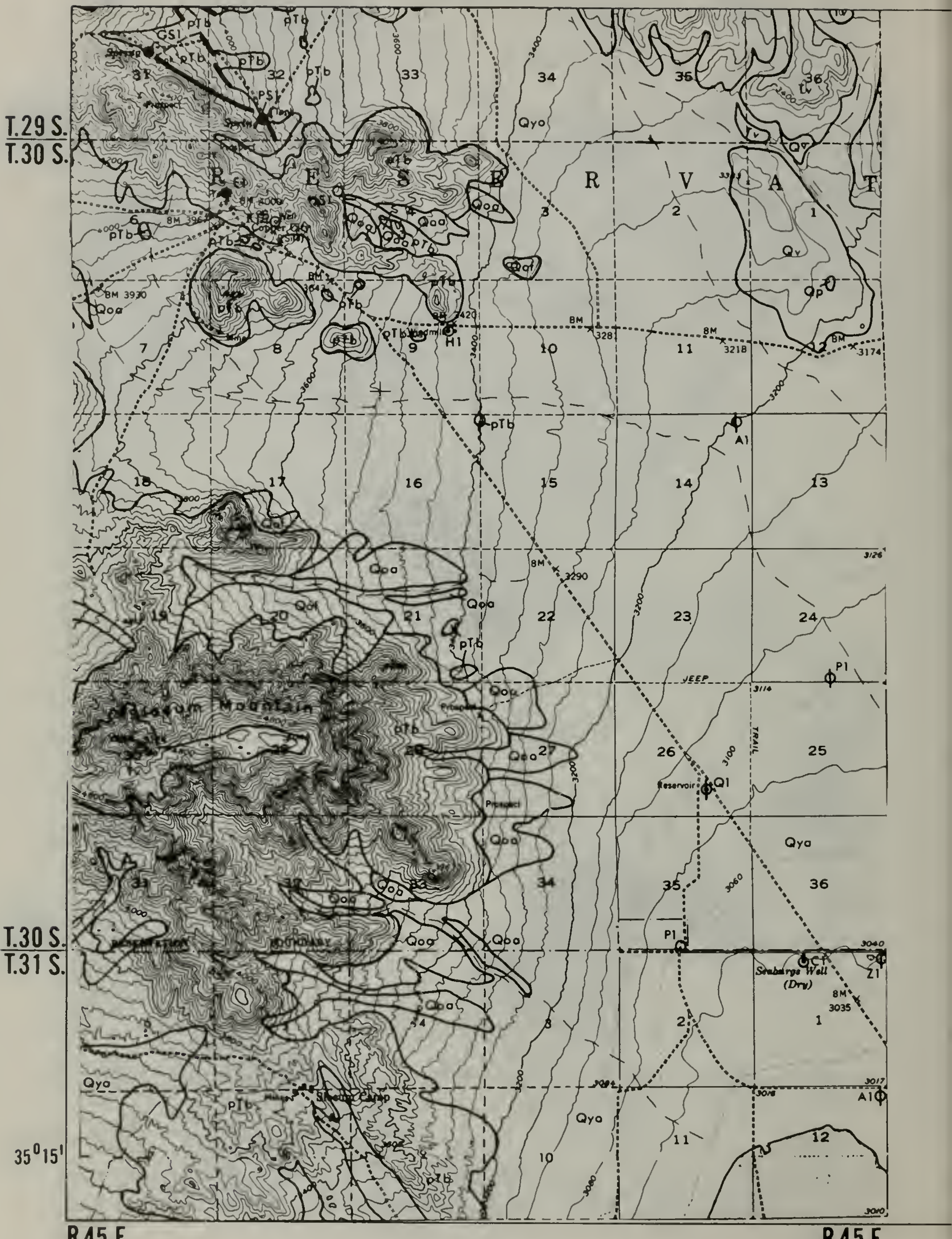
MAP 9


T.29 S.
T.30 S.
T.30 S.
T.31 S.
35°15'
R.43 E.
R.43 E.
Water Tank
Blackwater Well
BM 3290
BM 3457
BM 2904
BM 3095
BM 3521
BM 3952
3635
Qoo
Qof
Qyo
Qya
Qci
Qoa
pTb
Tv
Tc
Jc
N1

MAP 10

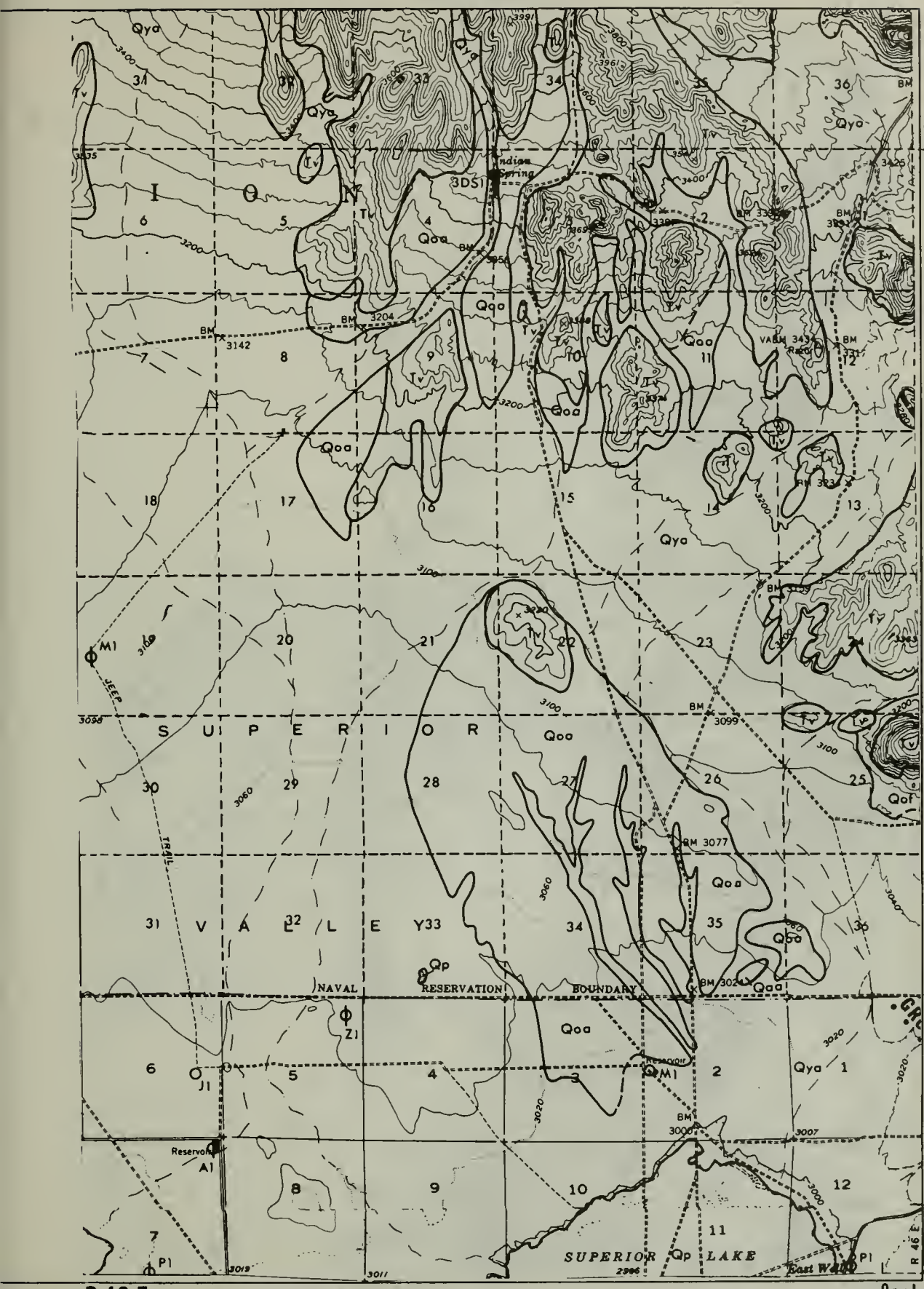

T.29 S.
T.30 S.
T.30 S.
T.31 S.
35°15'
R.44 E.
117°15'
R.44 E.
Granite Mtn
Windmill
Water Tank
BM 3927
BM 3786
BM 3685
BM 3765
BM 3900
NAVAL BOMBING RANGE
GRACE VALLEY
Qya
Qoa
Qaf
pTb

MAP 11

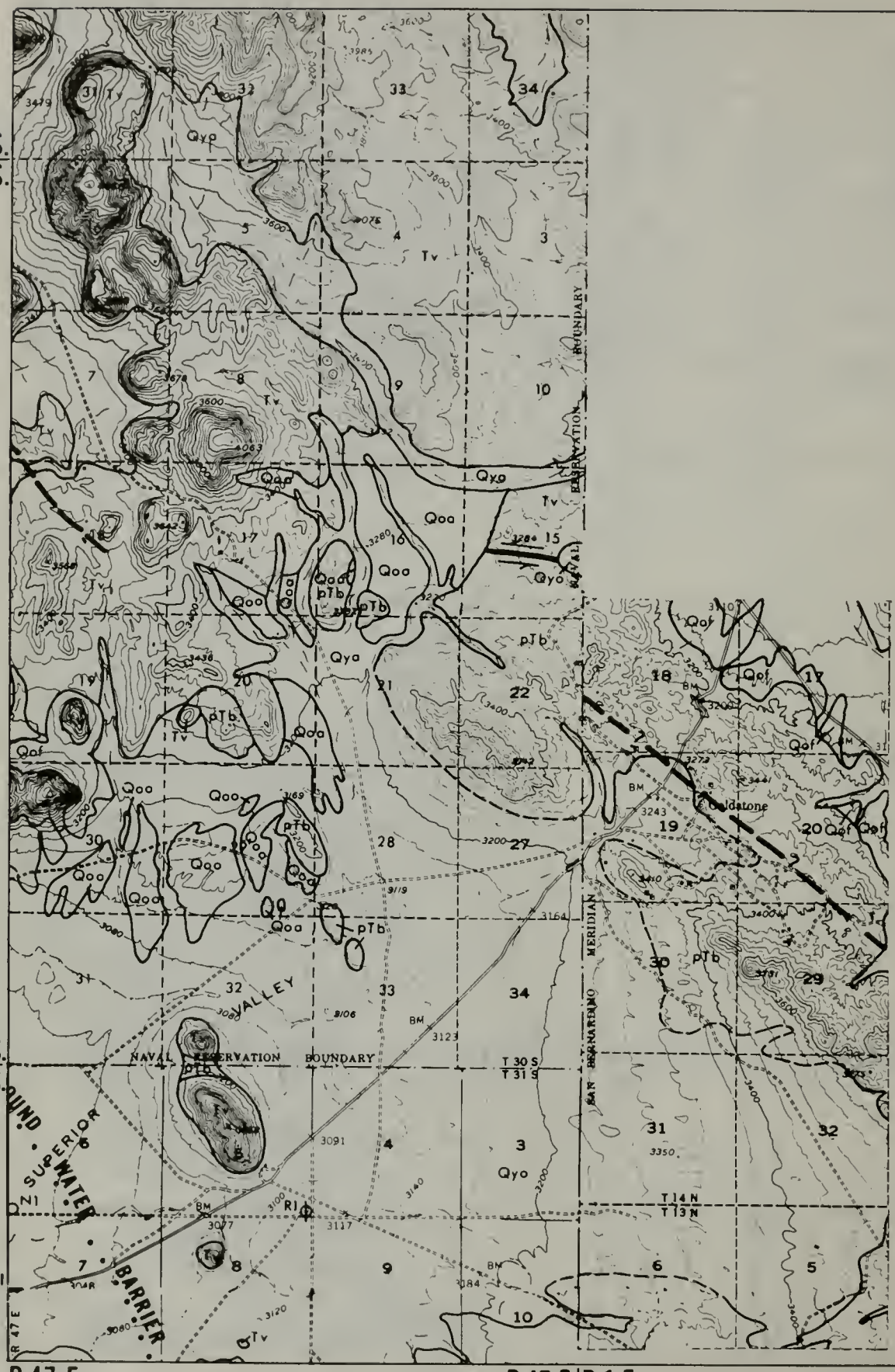


T.29 S.
T.30 S.
T.30 S.
T.31 S.
R.45 E.
R.45 E.
35°15'
R E S E R V A T
Qyo
Qoa
Qal
pTb
Qv
Qp
H1
A1
P1
Q1
Z1
JEEP
TRAIL
Reservoir
Prospect
Seaburgs Well
(Dry)
Shooting Camp

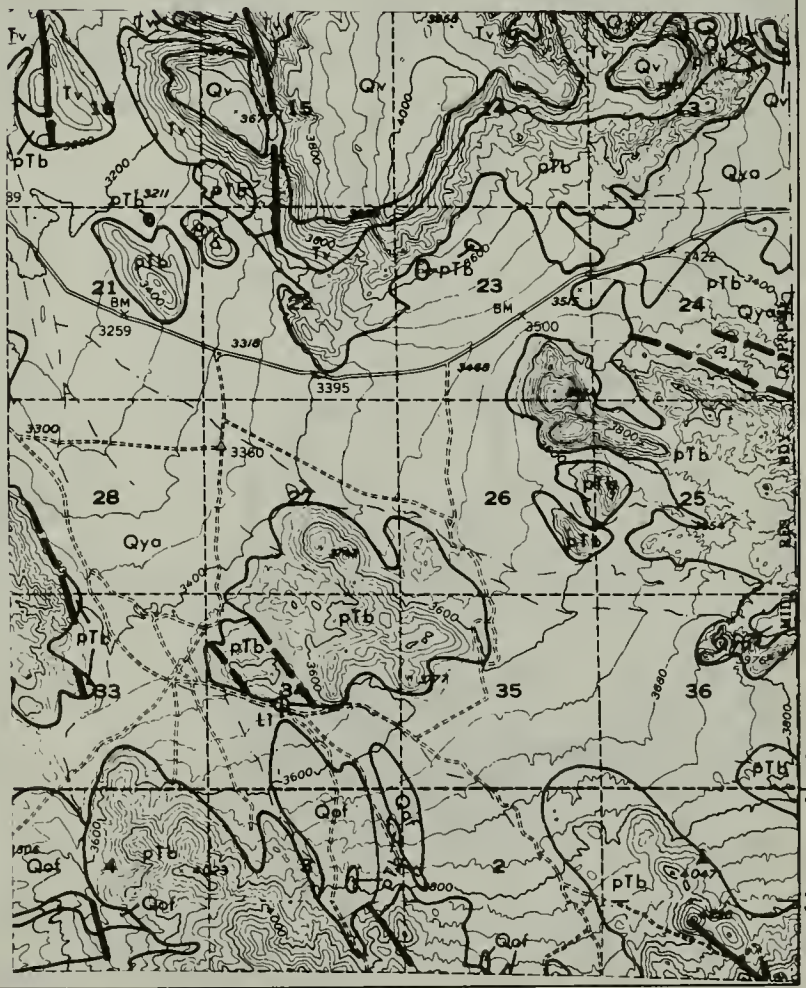
MAP 12


T.29 S.
T.30 S.
T.30 S.
T.31 S.
R.46 E.
117°00'
R.46 E.
35°15'
SUPERIOR
VALLEY
NAVAL RESERVATION BOUNDARY
SUPERIOR LAKE
Indian Spring
Reservoir
JEEP TRAIL
Qya
Qoa
Qaa
Qof
Qp
Tv
BM 3142
BM 3204
BM 3099
BM 3077
BM 3024
BM 3000
3200
3100
3060
3020
3007
3000

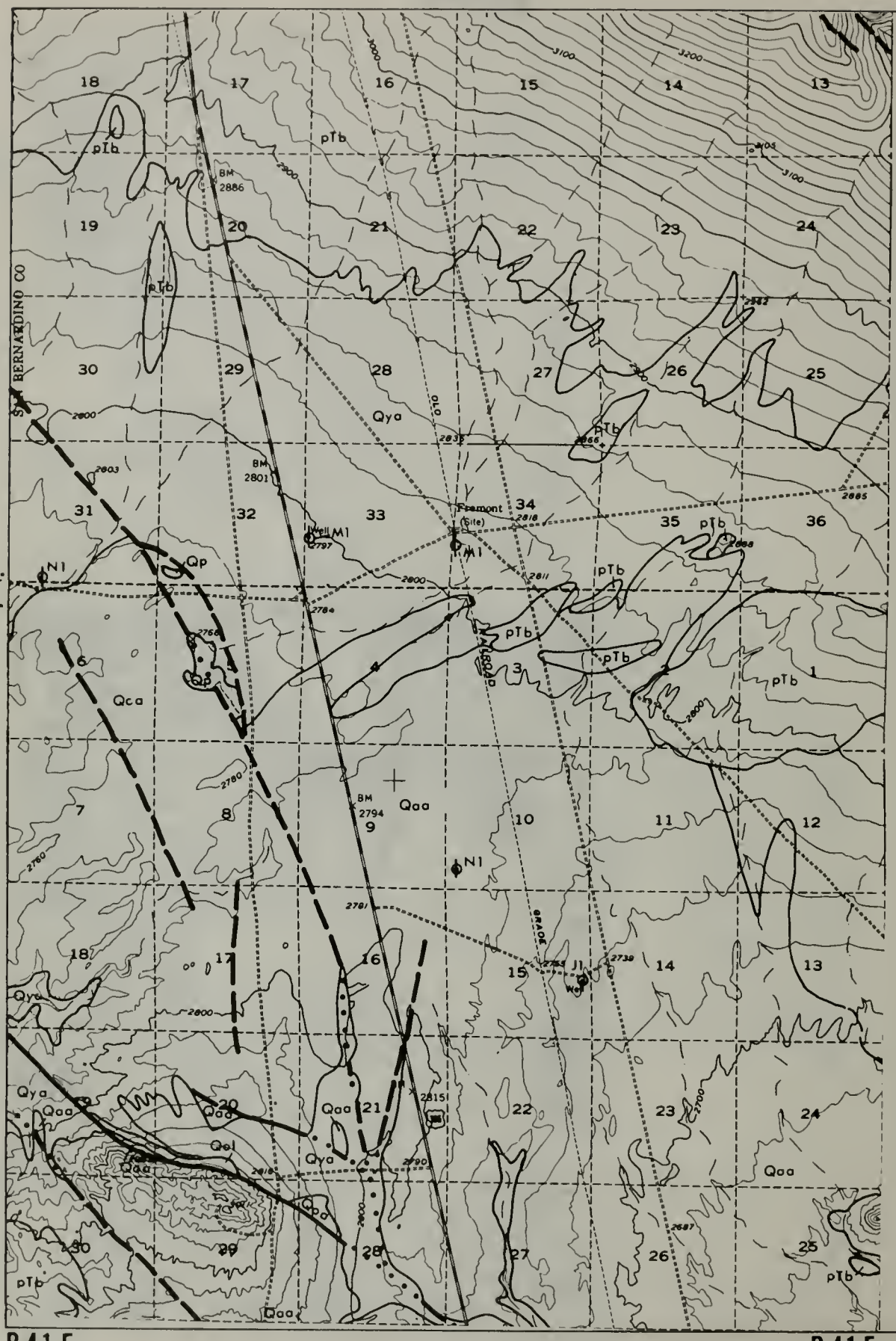
MAP 13


T.29 S.
T.30 S.
T.30 S.
T.31 S.
35°15'
R.47 E.
R.47 E.
R.1 E.
NAVAL RESERVATION BOUNDARY
SAN BERNARDINO MERIDIAN
T 30 S
T 31 S
T 14 N
T 13 N
VALLEY
SUPERIOR
BARRIER
Qyo
Tv
Qoa
Qoo
pTb
Qof
Qaf
BM
Baldstone

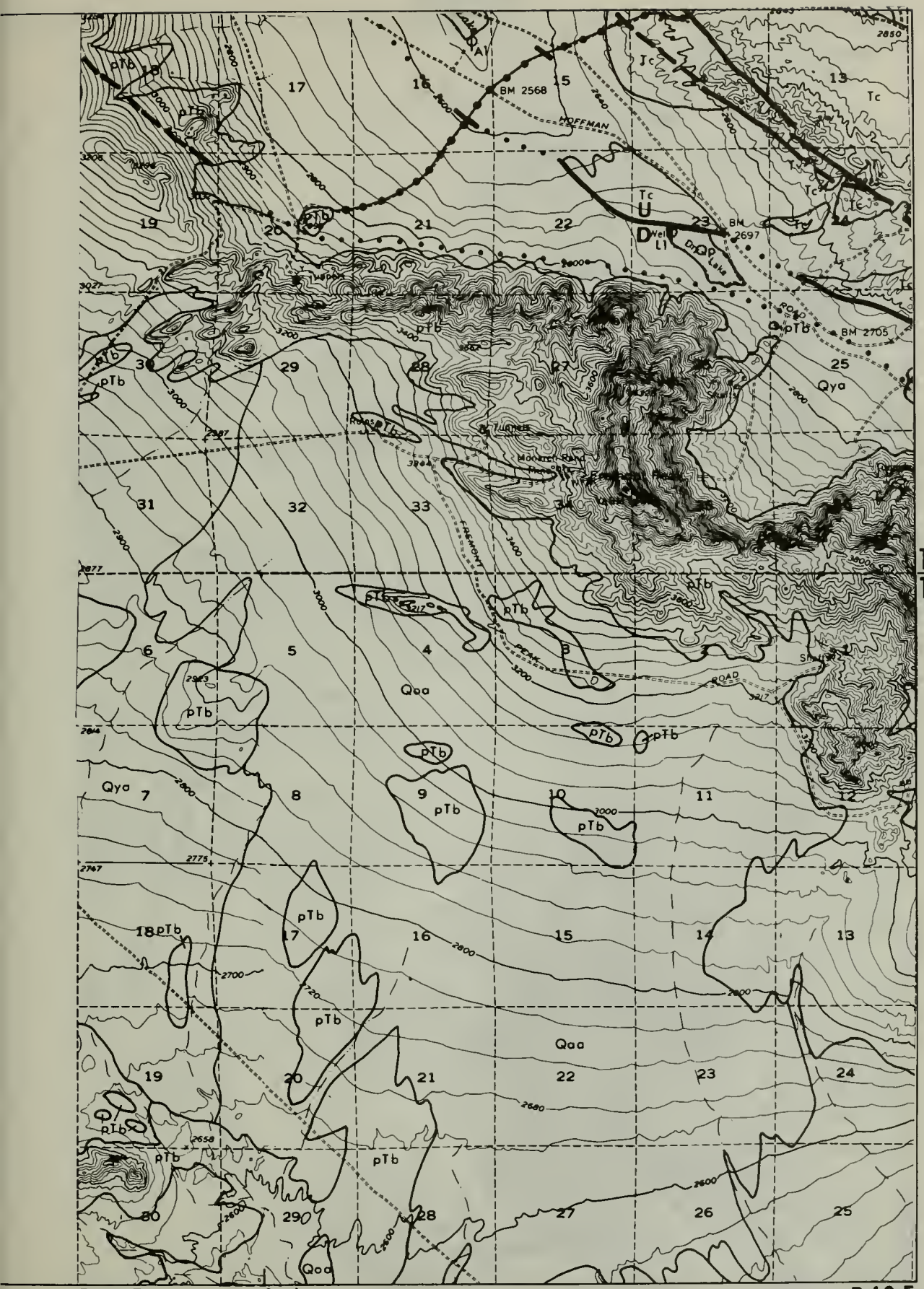
MAP 14


Tv
Qv
Qya
pTb
Qaf
1
2
3
4
13
14
15
21
22
23
24
25
26
27
28
33
34
35
36
3259
3395
3360
3500
3211
3300
3400
3600
BM
T.14 N.
T.13 N.
35°15'
R.1 E.

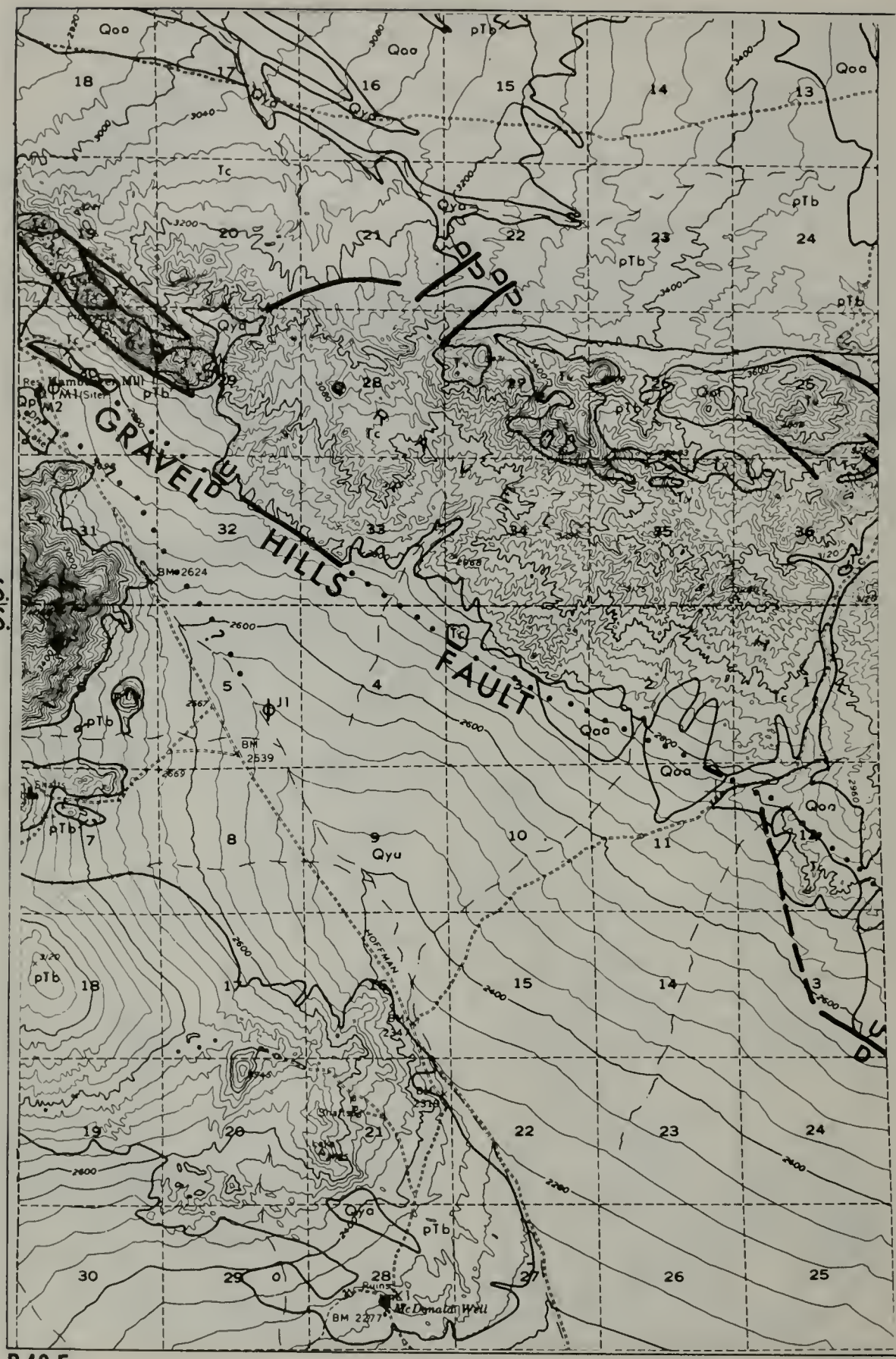
MAP 15


T.31 S.
T.32 S.
R.41 E.
R.41 E.
SAN BERNARDINO CO
Fremont (Site)
Inwell M1
M1
N1
Qp
Qca
Qaa
Qya
Qol
pTb
BM 2886
BM 2801
BM 2794
GRADE
18
17
16
15
14
13
19
20
21
22
23
24
30
29
28
27
26
25
31
32
33
34
35
36
6
5
4
3
2
1
7
8
9
10
11
12

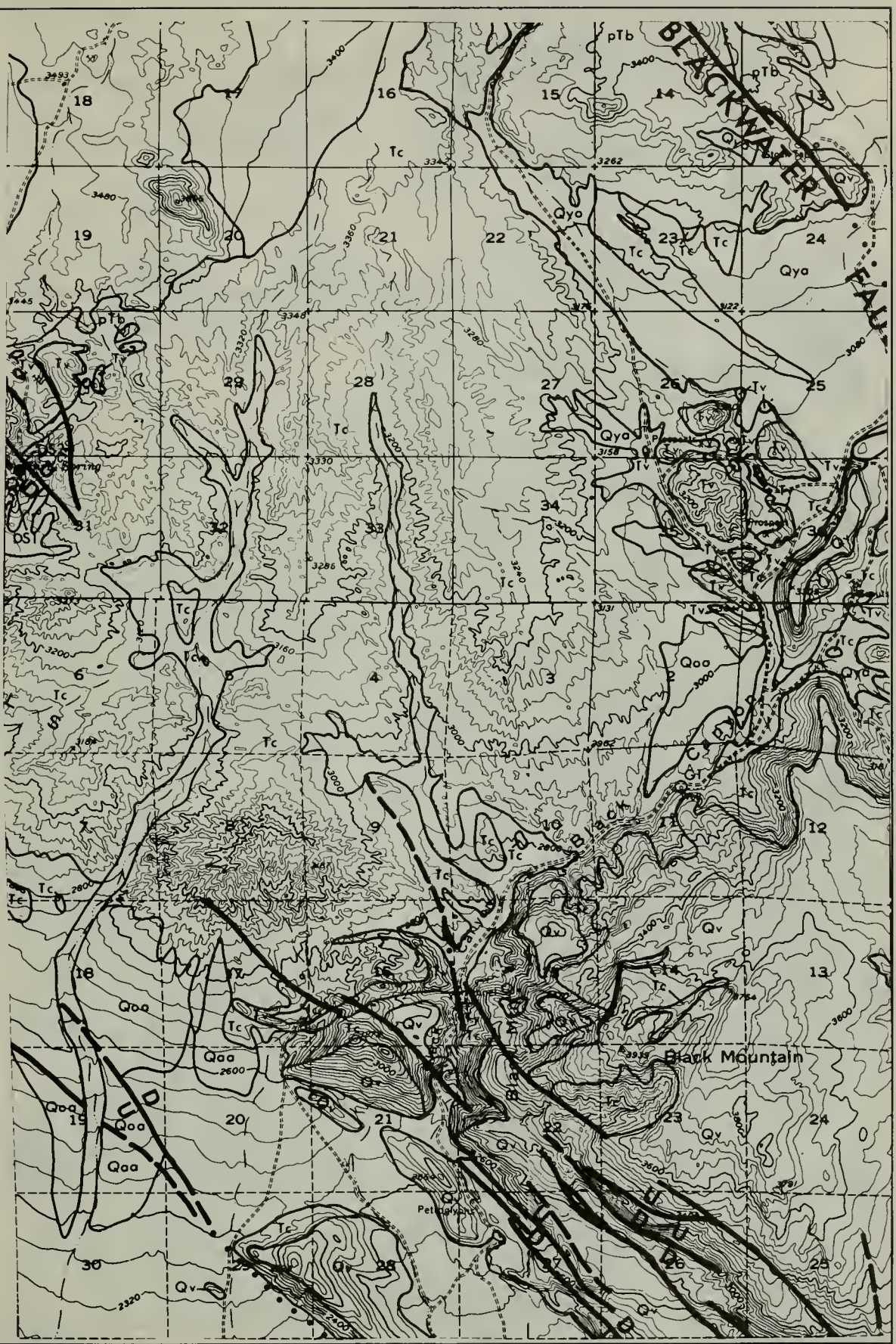
MAP 16


T.31 S.
T.32 S.
R.42 E.
117°30'
R.42 E.
BM 2568
BM 2697
BM 2705
HOFFMAN
FREMONT
PEAK
ROAD
Lake
Qaa
Qya
pTb
Tc

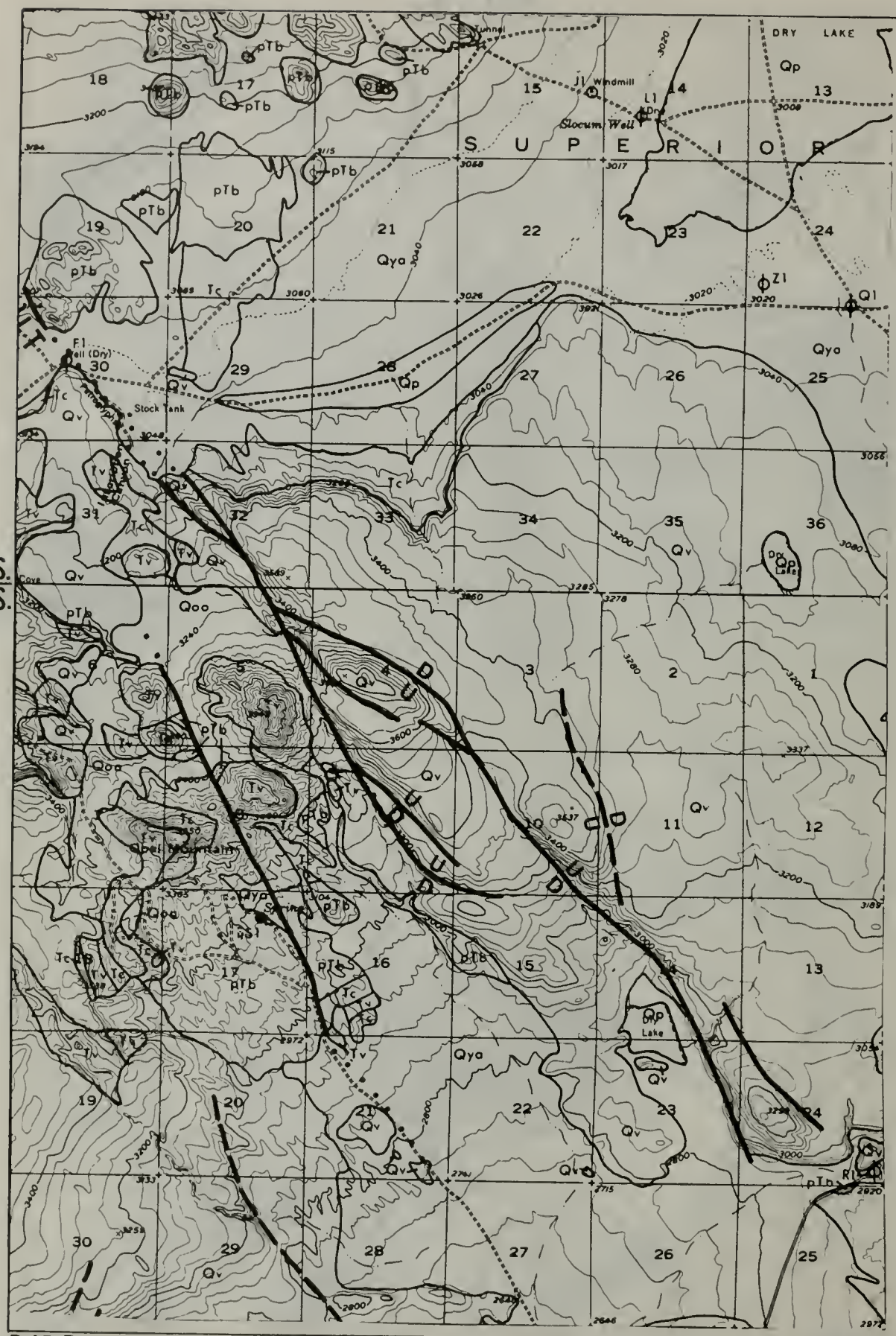
MAP 17


GRAVEL HILLS FAULT
U
D
T.31 S.
T.32 S.
R.43 E.
R.43 E.
Qoo
Qyu
pTb
Tc
Qpp
Mul
BM 2624
BM 2539
BM 2277
McDonald Well
HOFFMAN

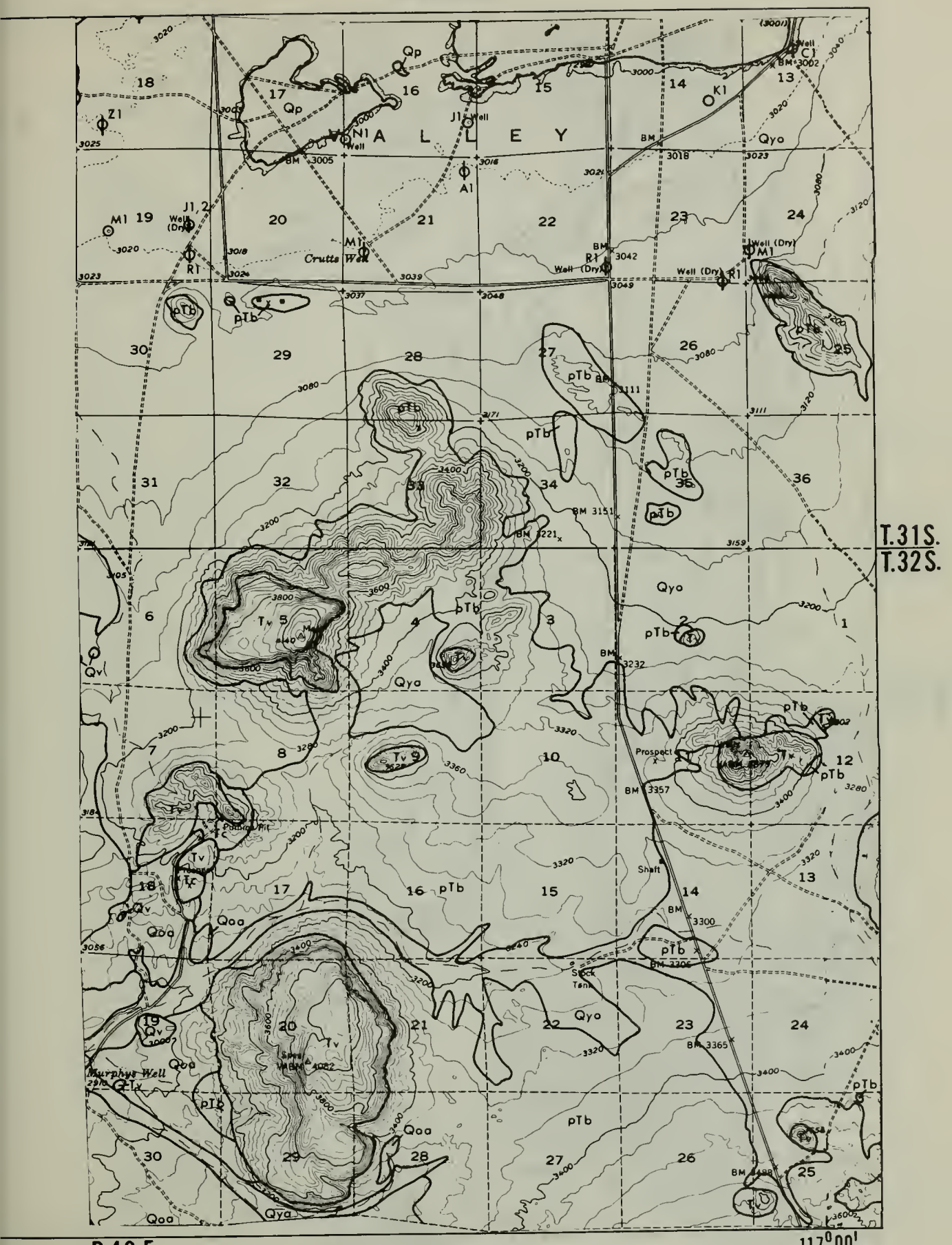
MAP 18


BLACKWATER
FAU
Black Mountain
pTb
Tc
Qyo
Qoo
Qaa
Qv
Tv
T.31 S.
T.32 S.
R.44 E.
R.44 E.
117°15'

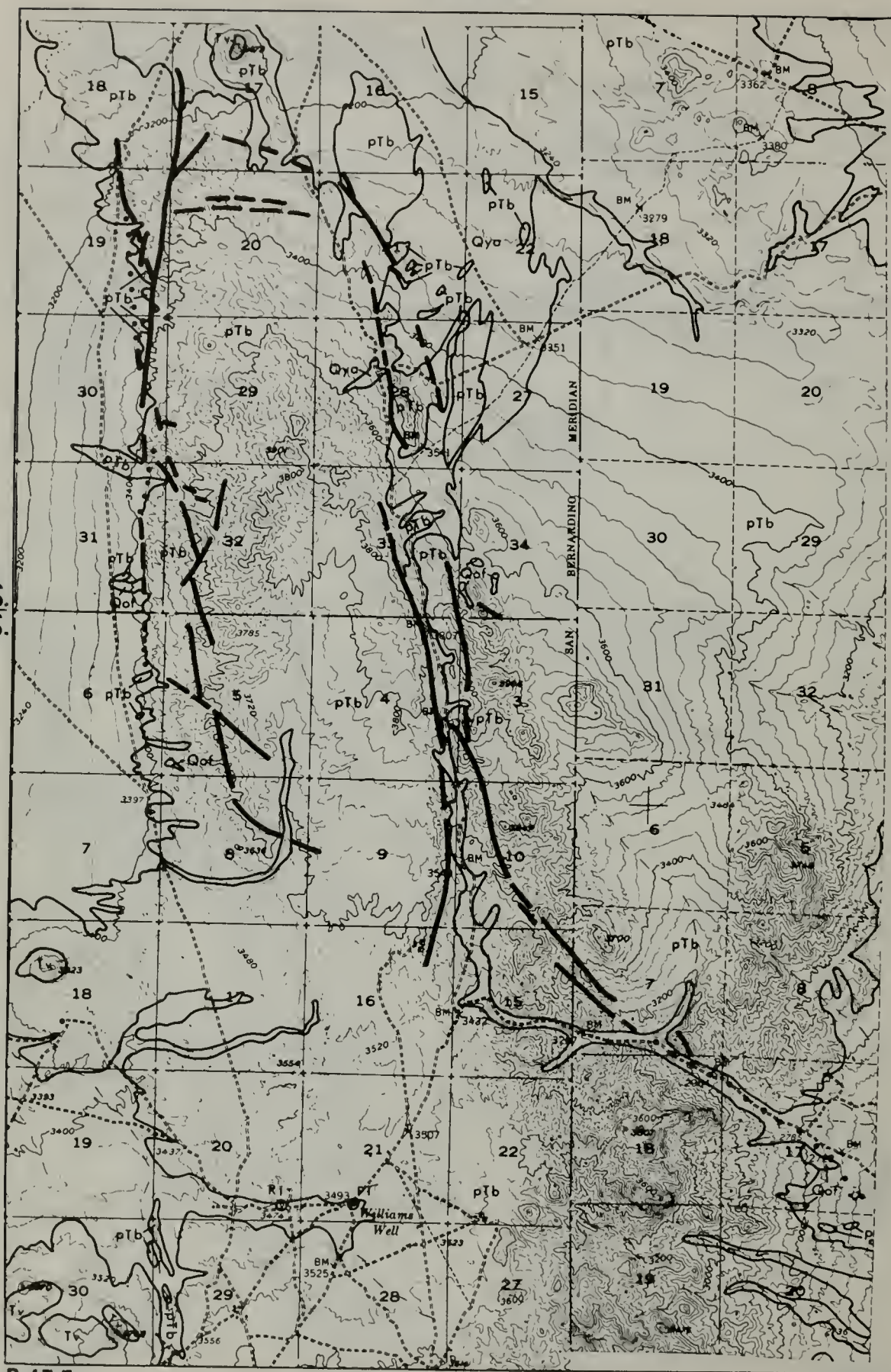
MAP 19


DRY LAKE
SUPERIOR
Windmill
Slocum Well
Stock Tank
Qya
Qyo
Qv
Qp
Qoo
pTb
Tc
Tv
Lake
T.31 S.
T.32 S.
R.45 E.
R.45 E.

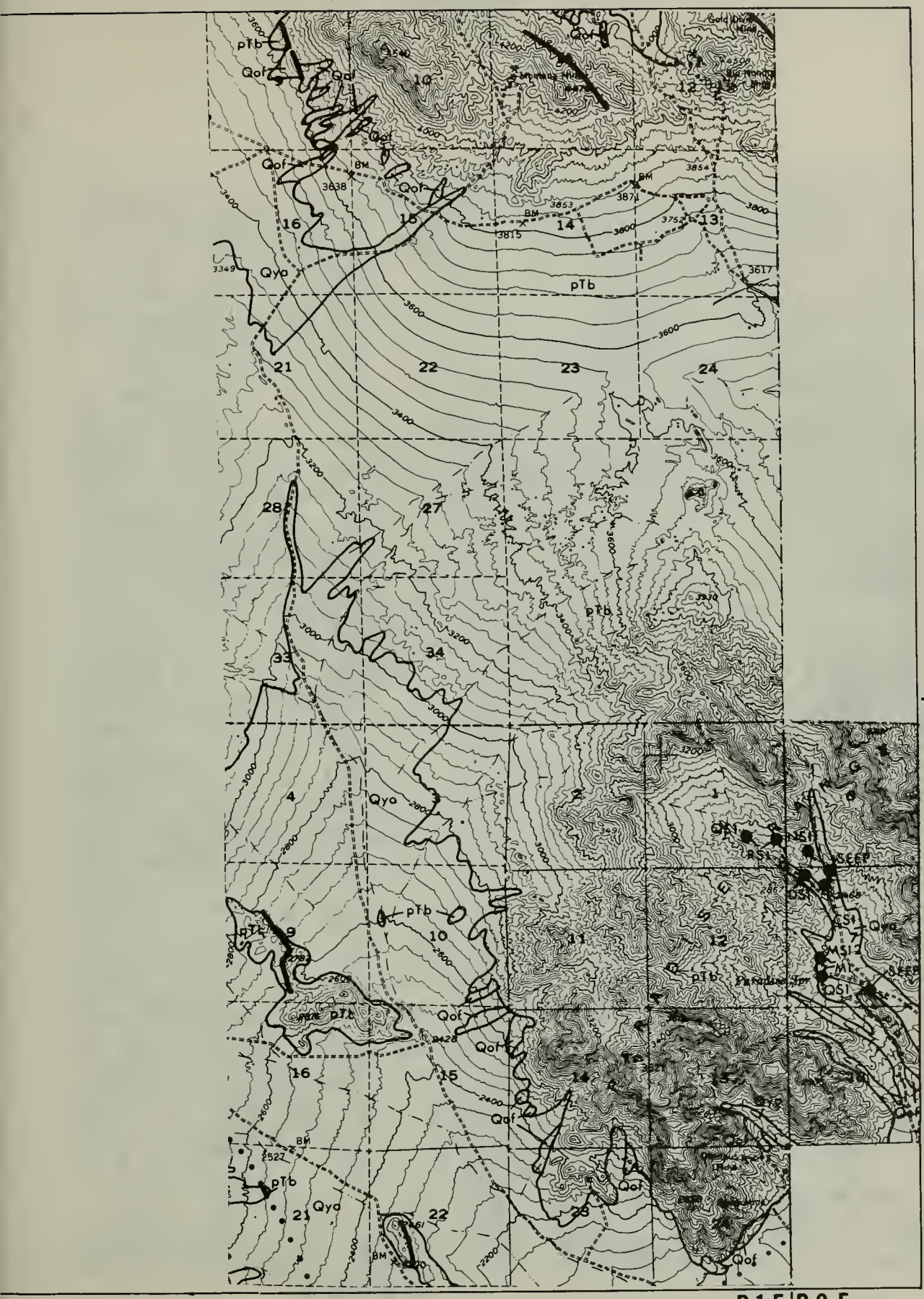
MAP 20


HALLEY
Crutts Well
Murphys Well
Prospect
Shaft
Stock Tank
Qp
Qyo
Qoa
Qya
Qv
Tv
pTb
T.31S.
T.32S.
R.46 E.
117°00'
R.46 E.

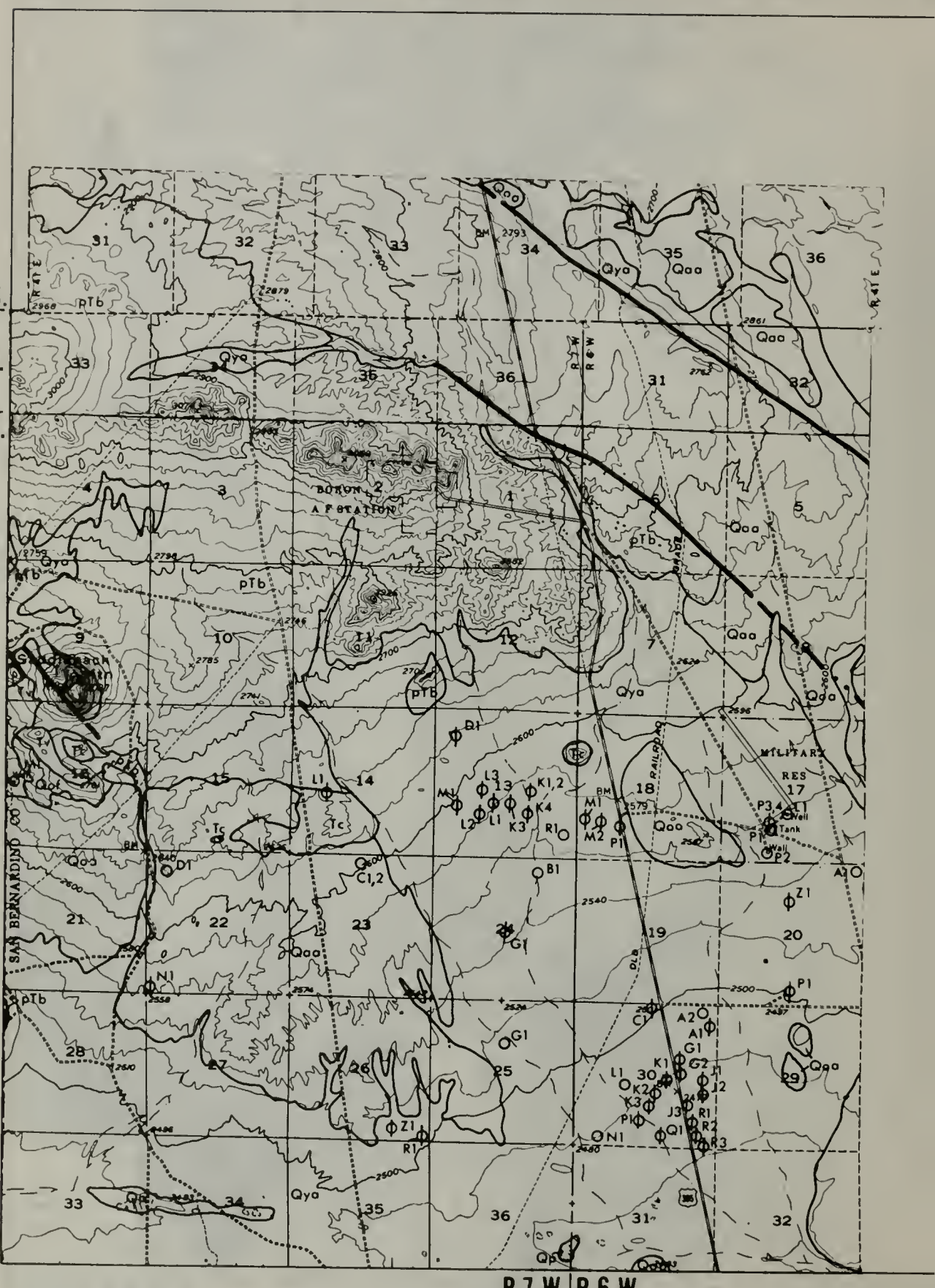
MAP 21


T. 31 S.
T. 32 S.
R.47 E.
R.47 E.
R.1 E.
SAN BERNARDINO MERIDIAN
pTb
Qya
Qof
Williams Well
BM 3525
BM 3507
BM 3493
BM 3437
BM 3351
BM 3279
BM 3362
BM 3380

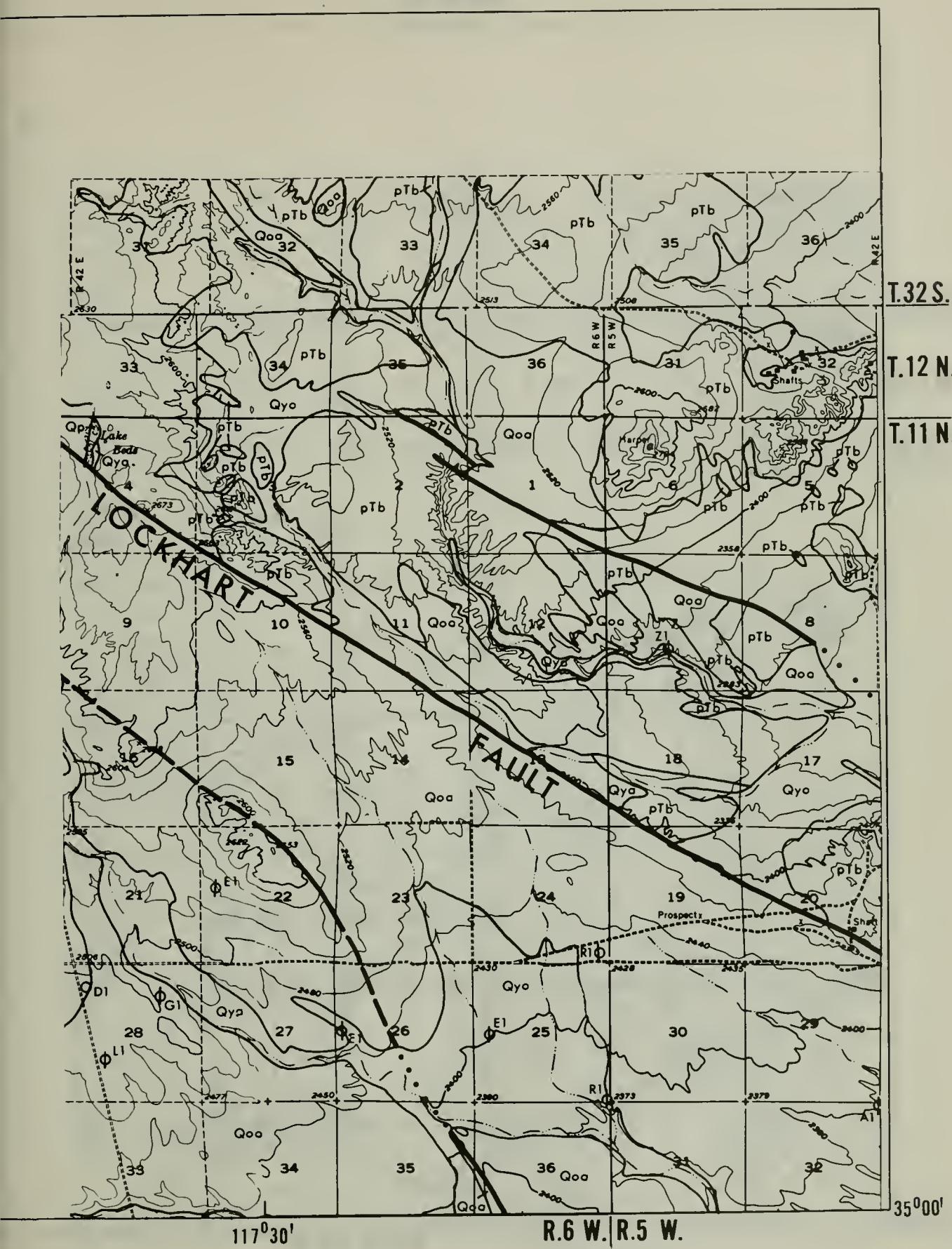
MAP 22


T. 13 N.
T. 12 N.
R. 1 E.
R. 2 E.
pTb
Qof
Qyo
Qsl
BM
3638
3815
3853
3854
3871
3752
3617
3349
3527
3461
3821
2428
Gold Dyke Mine
Improved Hill
Big Ironsides Mine
Paradise Jim
SEEP
MSI2
MI
QSI
RSI

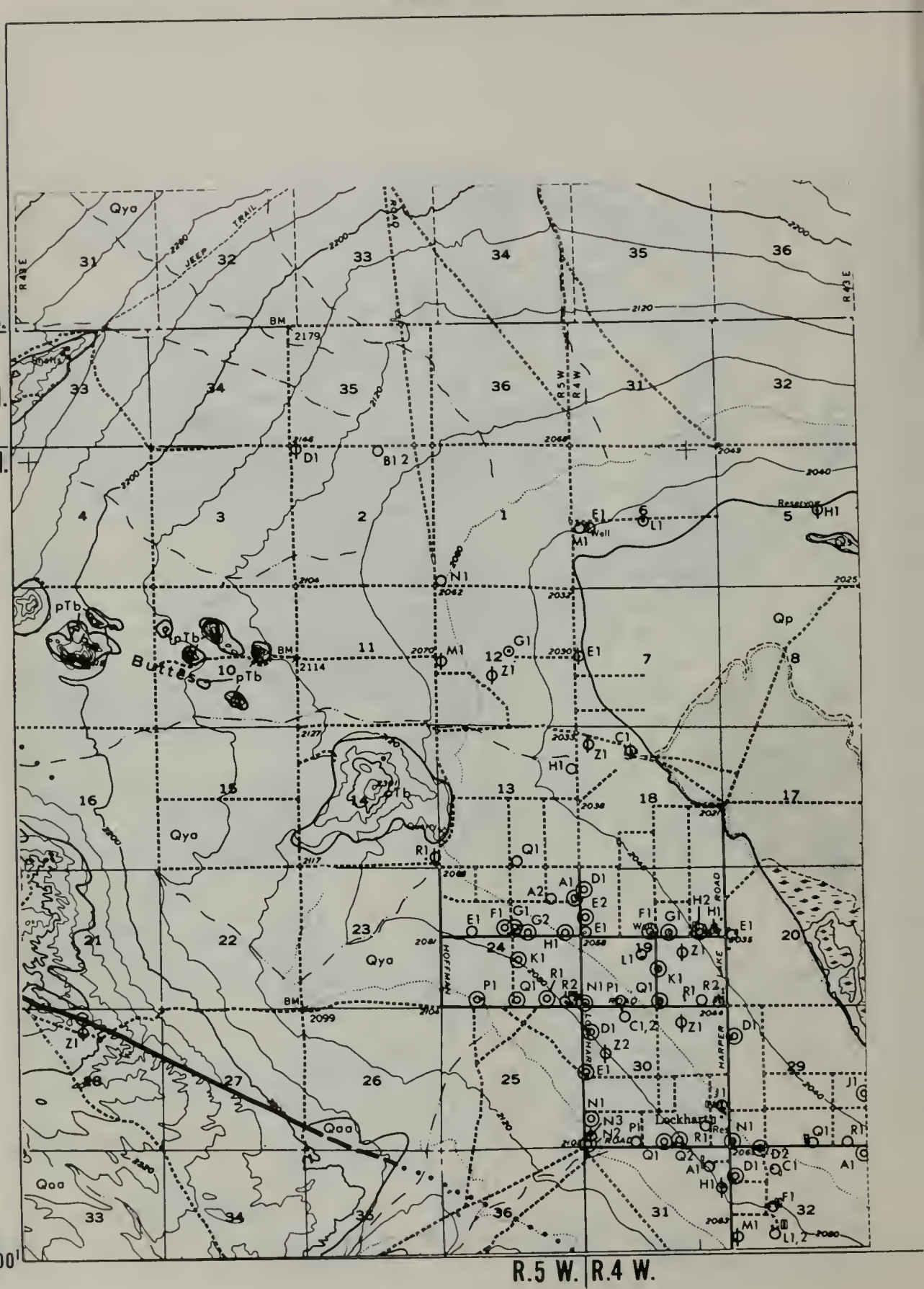
MAP 23


T.32 S.
T.12 N.
T.11 N.
T.11 N.
35°00'
R.7 W.
R.6 W.
BORON
AF STATION
SAN BERNARDINO
MILITARY RES
RAILROAD
Qaa
Qya
pTb
Tc
Qof

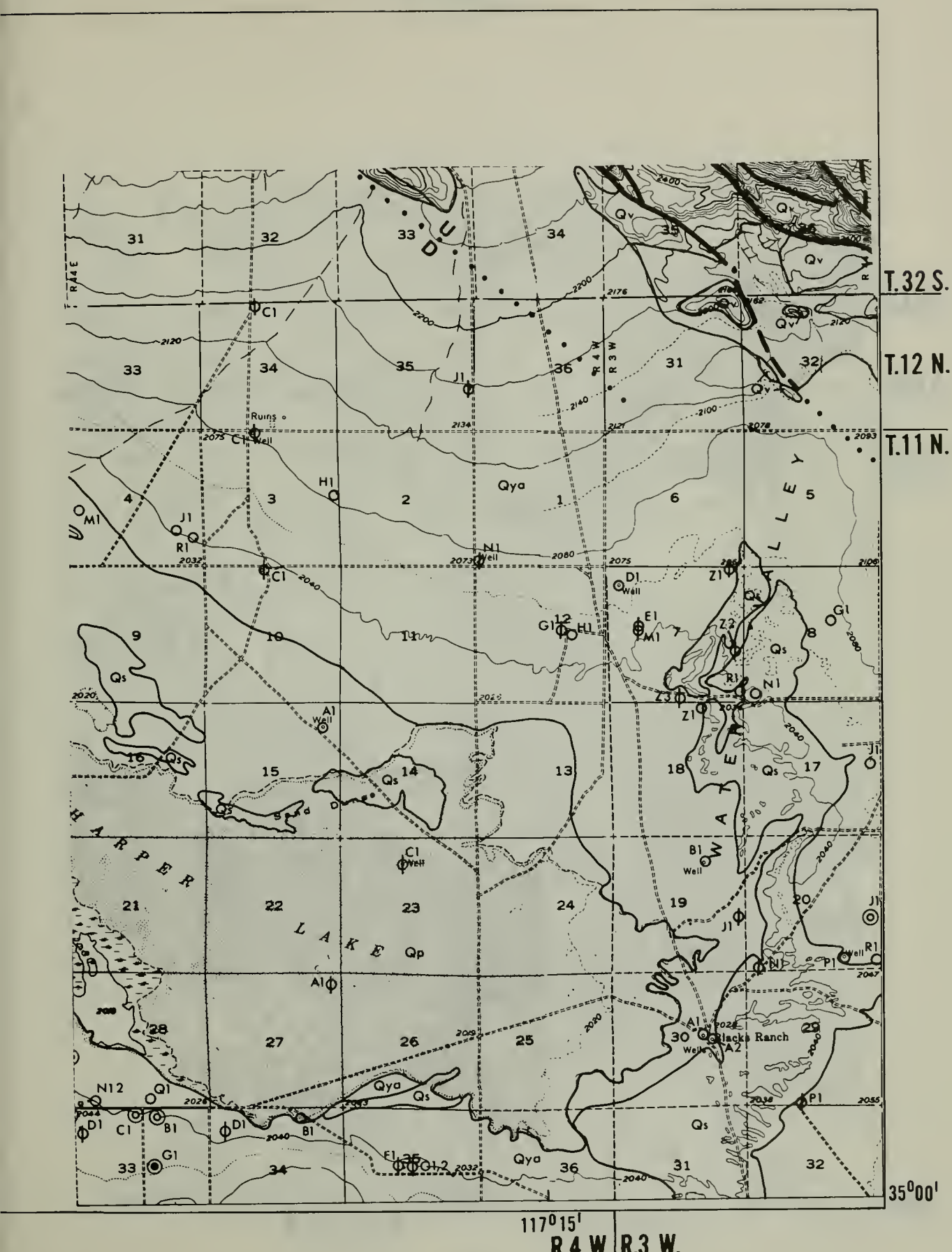
MAP 24


T.32 S.
T.12 N.
T.11 N.
LOCKHART
FAULT
Lake Beds
Qyo
Qoo
pTb
Qya
Shafts
Prospects
117°30'
R.6 W.
R.5 W.
35°00'

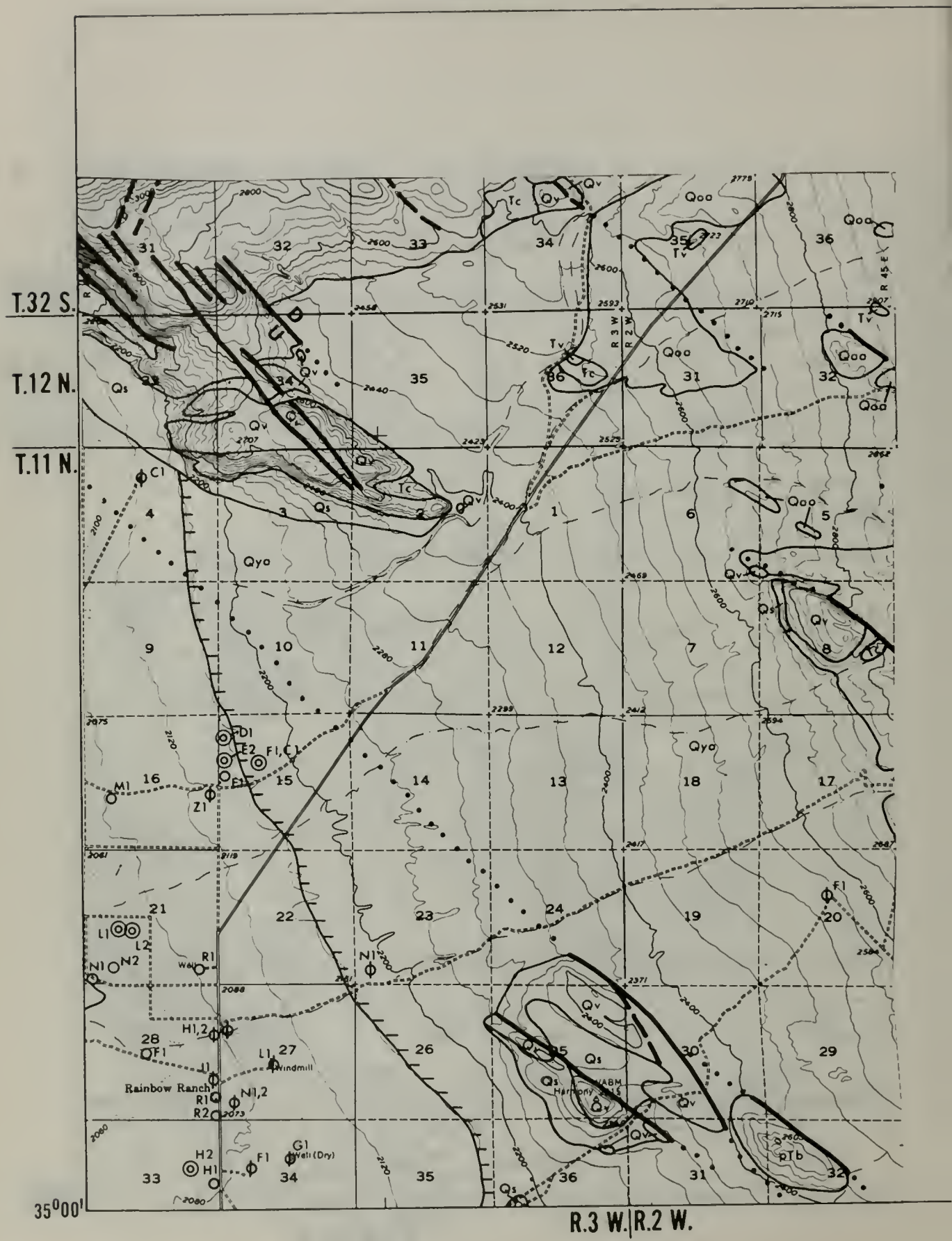
MAP 25


T.32 S.
T.12 N.
T.11 N.
R.5 W.
R.4 W.
35°00'
Qya
Qoa
Qp
pTb
Buttes
Lockhart
Reservoir
JEEP TRAIL
HOFFMAN
HARPER LAKE ROAD
BM 2179
BM 2114
BM 2099

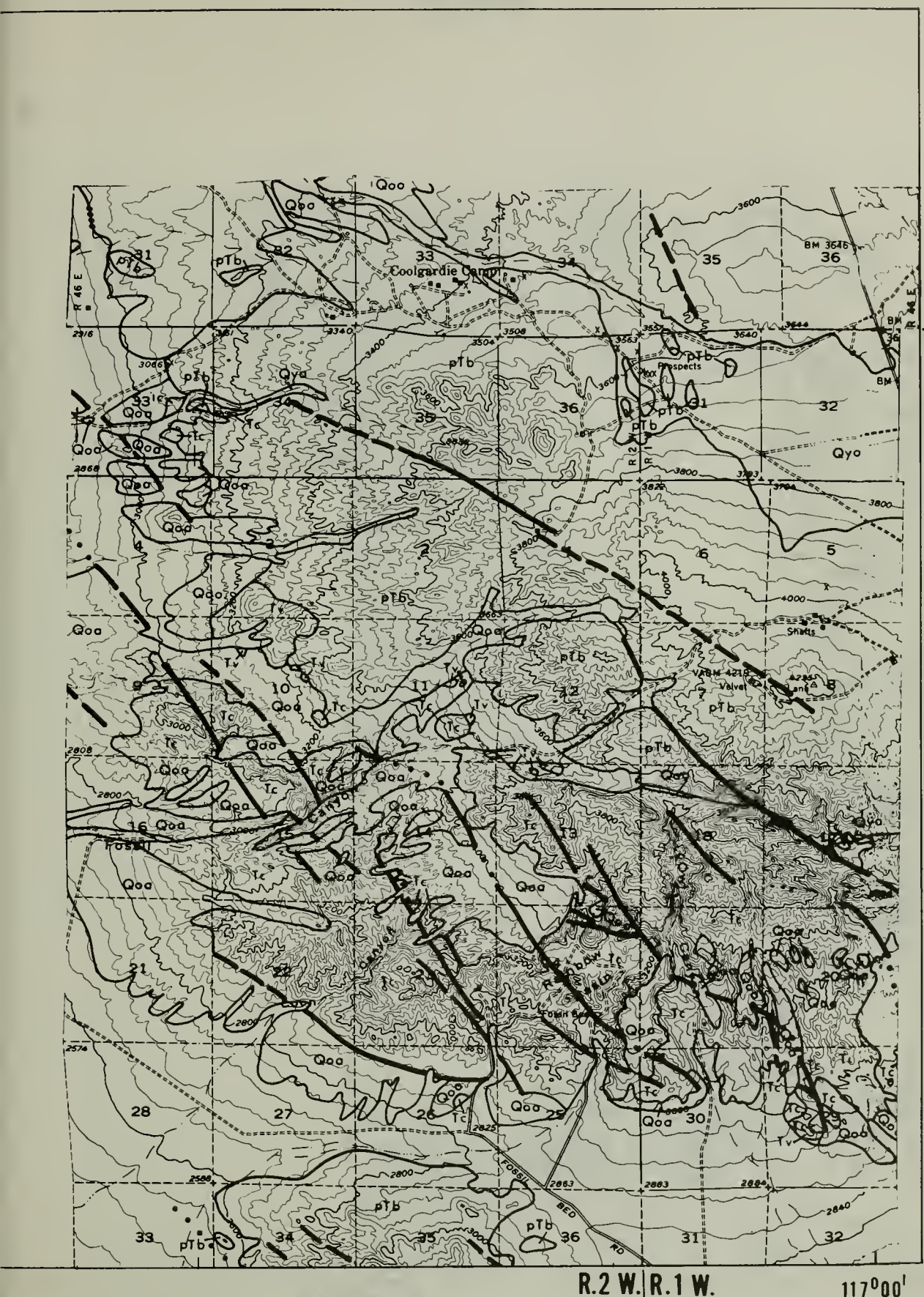
MAP 26


T.32 S.
T.12 N.
T.11 N.
35°00'
117°15'
R.4 W.
R.3 W.
HARPER LAKE
WATER VALLEY
Qp
Qs
Qya
Qv
Ruins
Well
Black's Ranch

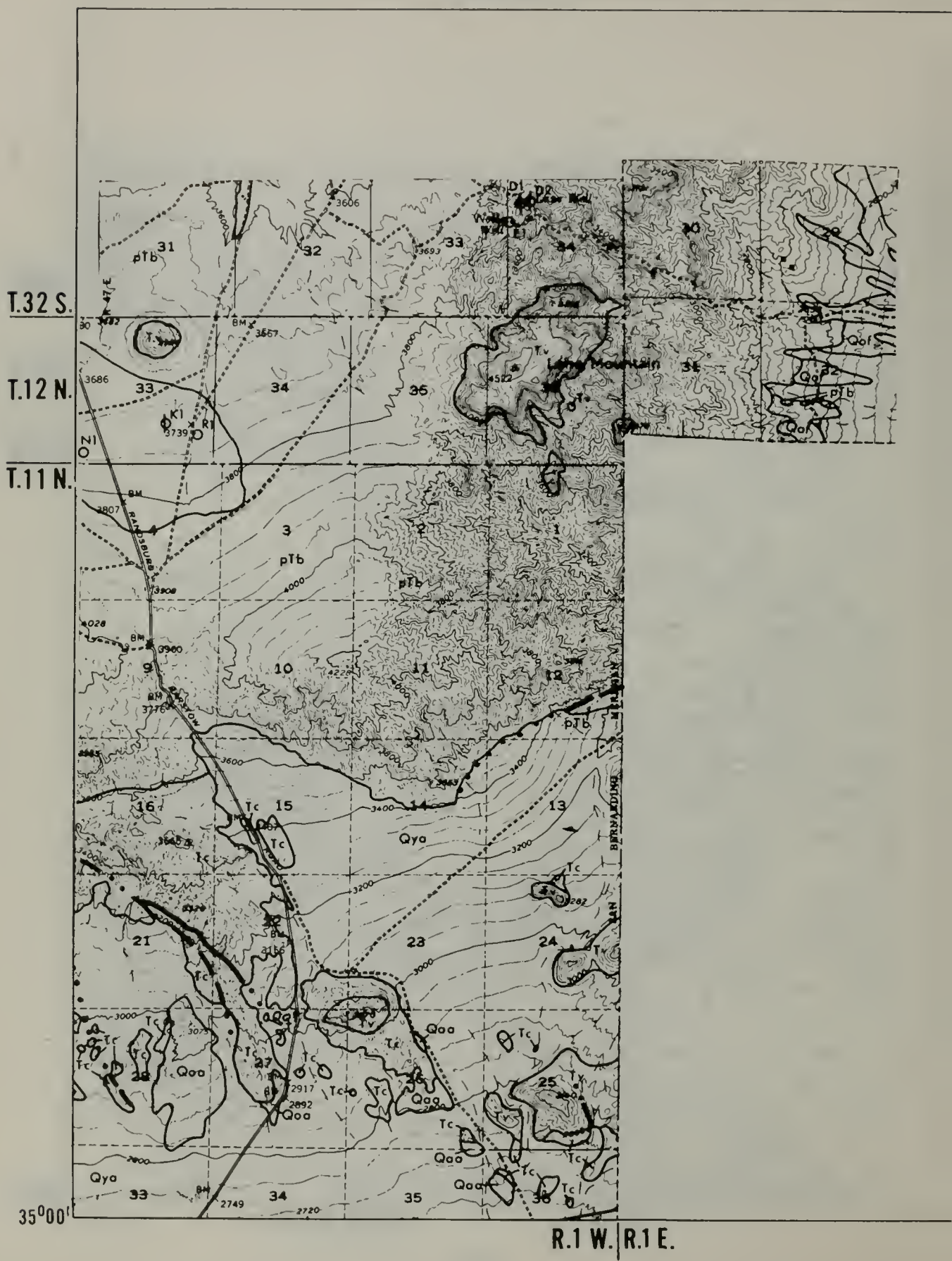
MAP 27


T.32 S.
T.12 N.
T.11 N.
35°00'
R.3 W.
R.2 W.
Rainbow Ranch
Windmill
Well (Dry)
Harmony
Qoo
Qv
Qs
Qyo
Tv
Tc
pTb

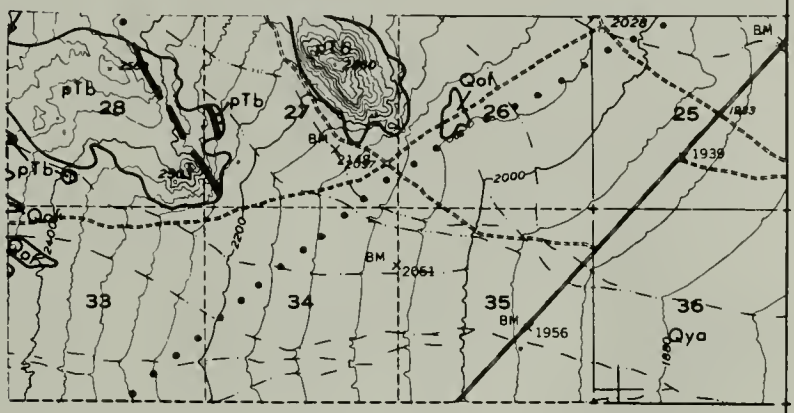
MAP 28


Coolgardie Camp
Prospects
Shafts
Fossil
Fossil Bed Rd
Qoa
pTb
Tc
Tv
Qya
Qyo
T.32 S.
T.12 N.
T.11 N.
R.2 W.
R.1 W.
35°00'
117°00'

MAP 29


T.32 S.
T.12 N.
T.11 N.
35°00'
R.1 W.
R.1 E.
Lone Mountain
RANDSBURG
BARNACLE MTN
pTb
Qoo
Qya
Qof
Tc
Tv
Kl
Pz
31
32
33
34
35
36
1
2
3
9
10
11
12
13
14
15
16
21
23
24
25
26
27
28

MAP 30



T. 12 N.

R. 1 E.

50 3-71 600